WMU Sasakawa Fellows' Network Meeting in the African Region



November 3 – 10, 2013 Novotel Accra Centre Hotel, Accra, Ghana

Hosted and Organized by "Friends of WMU, Japan" Secretariat in Cooperation with The Nippon Foundation and Ghanaian Sasakawa Fellows



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Resolution



RESOLUTION

We, the participants of the WMU Sasakawa Fellows' Network Meeting of the African Region held in Accra, Ghana from 4^{th} to 11^{th} November 2013.

Whereas the African Fellows have been dormant with minimal communication and interaction, RECOGNISING the need to create WMU Sasakawa Fellows' Network in the African Region for the purpose of establishing and maintaining a constant link among Country and Regional Fellows for mutual cooperation and exchange of beneficial information and CONSIDERING the availability of resources and the maximum utilization of current information and communication technologies and tools.

DO hereby ADOPT an ACTION PLAN to fulfill the objectives of the WMU Sasakawa Fellows' Network and its future expansion as follows.

- To enhance the Friends of WMU, Japan Website by making more effective meaning of communication among fellows and for the promotion of Sasakawa Network to benefit the maritime sector;
- To regularly update the Fellows' List to keep the directory alive and relevant (beneficial),
- To improve the Newsletter of Friends of WMU Japan by regularly contributing articles touching on current maritime issues and challenges in our regions;
- To utilize our respective maritime knowledge, expertise and experience, individually as well as collectively, for the development of African maritime sector;
- To establish Country Focal Points who shall form the executive to administer a Regional Secretariat to monitor, communicate and sustain future activities for expansion of the Sasakawa Fellows' Network. They shall also spearhead regional meetings to be held every three years commencing in 2015; and

RESOLVE to cooperate actively in the implementation of this Action Plan within the African Region as undersigned;

Name

Nana Esi Soderberg (GHANA)

Stephen Mwamure Toya (KENYA)

Felicity Ankoma - Sey (GHANA)

Cho Mujingni Jenette Tifuh (CAMEROON)

Signature



Yusuf Mohammad Bala (NIGERIA) Randrianantenaina Jean Edmond (MADAGASCAR) Geoffrey Gurumyen Semnoe (NIGERIA) Tumaini Shabani Gurumo (TANZANIA) Stella Joshua Katondo (TANZANIA) Kennedy Kishawi (KENYA) Joseph Sheketeni Banda (MALAWI) Hassan Mrisho Kheri (TANZANIA) Jack Okon Showell (NIGERIA) Dallas Eric Laryea (GHANA) Alexander Adu-Antwi (GHANA) Samwel kipkosgei Kiptoo (KENYA) Musa Hassan Musa (KENYA) Amos Lasanah Zanwonjah (LIBERIA) Ake Lazare Abe (COTE D'IVOIRE) Catherine Haizel (GHANA) Feseha Andualem Getu (ETHIOPIA)



Variety of Pictures

Variety of Pictures from the Network Meeting



























Variety of Pictures from the Network Meeting

OPRF

















Variety of Pictures from the Network Meeting





















Time Schedule



Time Schedule

November 4th (Mon) - DAY 1

WMU Sasakawa Fellows' Network Meeting					
Time Schedule Note					
$17:00 \sim 18:30$	Prior meeting among participants (*Every Sasakawa Fellow needs to attend this meeting)	Accommodation in Accra: Novotel Accra City Centre Hotel			
$18:30 \sim 20:00$	Welcome Reception (90 mins)				

November 5th (Tue) - DAY 2

WMU Sasakawa Fellows' Network Meeting							
Time	Schedule Note						
$8:30 \sim 8:35$	Welcome Speech Ms. Nana Esi QUANSAH-SODERBERG (Class of 2008) (Representative of Ghanian Sasakawa Fellows)						
8:35 ~ 8:45 Opening Remarks Mr. Eisuke Kudo (Special Advisor, Ocean Policy Research Foundation)							
$8:45 \sim 9:45$	Special Lecture (1) - incl. Questions & Answers Mr. Toshio Hikima (Principal, Marine Technical College, Japan)						
$9:45 \sim 10:45$	Special Lecture (2) - incl. Questions & Answers Mr. Osamu Marumoto (Project Officer, Counter-Piracy Project Implementation Unit, International Maritime Organization (IMO))						
$10{\stackrel{{\scriptstyle :}}{\scriptstyle 45}}\sim 11{\stackrel{{\scriptscriptstyle :}}{\scriptstyle 00}}$:00 Short Break (30 mins)* A Goup Photo Session included						
$11:00 \sim 12:30$	30 Skull Session Facilitator - Mr. Toshio Hikima & Mr. Osamu Marumoto						
$12:30 \sim 14:00$	Lunch Break (90 mins)						
$14:00 \sim 14:30$	Agenda 1 : Recent Sasakawa Fellows' Activities in each country (30 mins) Updating Fellows' List & its Utilization						
$14:30 \sim 15:00$	Agenda 2 : Mutual Communication by Internet (30 mins) Website Utilization						
$15:00 \sim 15:30$	Agenda 3 : Friends of WMU, Japan Newsletter (30 mins)						
$15:30 \sim 16:00$	Agenda 4 : Expansion of the Network (30 mins)						
$16:00 \sim 18:00$	16:00 ~ 18:00Making Group Reports (Categorized by Agenda) *Short Break included						
	Dinner						



November 6th (Wed) - DAY 3

WMU Sasakawa Fellows' Network Meeting							
Time	Schedule Note						
$8:15 \sim 9:00$	Registration for SAFE 20th Anniversary Symposium						
$9:00 \sim 9:05$	Welcome, Hon Professor Ruth Oniang'o, Chairpoerson, SAFE, and Chair of the Symposium						
$9:05 \sim 9:30$	Very Rev Professor S.K Adjepong, former Vice Chancellor of the University of Cape Coast						
$9:30 \sim 9:43$	Video message: former US President, Jimmy Carter						
$9:43 \sim 10:15$	0:43 ~ 10:15 Opening of the Symposium: HE Hohn Dramani Mahama, President of the Republic of Ghana, who also launches "Setting the Grassroots on Fire", the story of Sasakawa in Ghana						
$10:15 \sim 10:35$							
$10:35 \sim 10:55$	$0.35 \sim 10.55$ Dr Deola Naibakelao, managing Director, SAFE						
$10:55 \sim 11:15$	Hon Clement Kofi Humado MP, Minister of Food and Agriculture, Ghana						
$11:15 \sim 11:45$	Keynote address: HE Dr Akinwumi Adesina, Minister of Agriculture and Rural Development, Federal Republic of Nigeria						
$11{\stackrel{.}{.}}45 \sim 11{\stackrel{.}{.}}55$	Chairperson concludes morning session						
11:55	11:55 End of Morning Session						
12:45 \sim							
	SEP visits (3 SEP visits to different projects) 2 hours.						
$18:30 \sim$	18:30 \sim Arrive at hotel: Coconut Grove						
19:30 \sim	Dinner at Coconut grove Hotel	Accommodation in Cape Coast: Coconut Grove Beach Report					

November 7th (Thu) - DAY 4

Alumni Meeting among WMU Graduates and SAFE Graduates - Cape Coast, Ghana:				
Time	Schedule	Note		
$10:00 \sim 10:05$	Opening Remarks by Dr. Deola Naibakelao, Managing Direcgtor, SAFE	25 WMU Graduates 15 SAFE Students		
$10:05 \sim 10:15$	Words from the Representatives of WMU Alumni & SAFE Student			
$10:15 \sim 10:35$	~ 10:35 Ceremony of the Presentation of Commemorative Gift from UCC to Mr. Sasakawa (20 minutes)			
$10:35 \sim 10:50$	Greeting from Mr. Katsuhiro Motoyama, The Nippon Foundation			



$10:50 \sim 11:05$	Presentation (WMU graduate) Mr. Dalls Eric Laryea, Ghana 2011	*including Q&A (15 minutes)
11:05 \sim 11:20	Presentation (WMU graduate) Mr. Jean Edmond Randrianantenaina, Madagascar 2010	*including Q&A (15 minutes)
11:20 \sim 11:40	Presentation (SAFE student)	*including Q&A (20 minutes)
$11:40 \sim 11:45$	Closing Remarks (Mr. Eisuke Kudo, Special Advisor, Ocean Policy Research Foundation)	
11:45 \sim 12:00	Group Photo Session	
$12:15 \sim 13:30$	Lunch time @ UCC	
13:30 ~	Site Visits (Cape Coast Castle, Fort St. Jago, etc)	
19:00 ~	Symposium Dinner at Elmina Beach Resort Hotel	

November 8th (Fri) - DAY 5

Time	Schedule	Note
$8:00 \sim 11:30$	Back to Accra	Bus
$12:00 \sim 13:30$	Lunch	
$13:30 \sim 13:40$	Chairperson introduce Presentation speakers	
$13:40 \sim 15:20$	Exchange of Information on the maritime affairs (incl. Q&A)	5 Presentations × 20mins (100 mins)
$15{\stackrel{.}{.}}20\sim15{\stackrel{.}{.}}40$	Short Break (20 mins)	
$15:40 \sim 17:20$	Exchange of Information on the maritime affairs (incl. Q&A)	5 Presentations × 20mins (100 mins)
Dinner		

November 9th (Sat) - DAY 6

Time	Schedule	Note		
$8:30 \sim 10:00$	Writing up the Discussion Report in each Session			
$10:00 \sim 11:00$	Debriefing the Report in each Session			
$11:00 \sim 11:10$	Closing Remarks (Mr. Eisuke Kudo of OPRF)			
$11{:}15 \sim 12{:}30$) Lunch Break (75 mins)			
$13:00 \sim 17:30$	Field Study Tour organized by Ghanian Fellows	Tema Port Tour		
$18:30 \sim 20:00$	Farewell Reception			

November 10th (Sun) - DAY 7

Time	Schedule	Note
	Departure (all the participants)	

Opening Session

SOPRF

Opening Remarks

Eisuke Kudo Special Adviser, OPRF

Dear Sasakawa Fellows, it is a great pleasure for me to share the joy of holding this network meeting with you, and thank you very much for coming to the meeting today.

I would also like to express my warmest gratitude to Prof. Hikima of Marine Technical College in Kobe and Mr. Marumoto from IMO for taking time out of your busy schedule.

My gratitude will be extended to the organizations that you belong to and to your superiors for allowing you to join this meeting. Now that you have been well informed of the goal of this meeting, I will make my opening remarks as briefly as possible.

I am sure that some senior graduates can remember Sasakawa Fellows Meeting held in Tokyo in 2001 for the purpose of establishing our network.

Since then, Friends of WMU, Japan secretariat of the OPRF has put our great efforts to maintain the Sasakawa fellows' network more effectively, to issue newsletter periodically, printing Sasakawa Fellows' Directory every 2 to 3 year, and updating our website frequently.

Besides, we held the Southeast Asian Regional network meeting in Bangkok in 2007 and the South Asian Regional Meeting in Colombo in 2010 by inviting a limited number of Sasakawa Fellows.

In order to maintain our network, many Sasakawa Fellows have written letters to Mr. Sasakawa and also have contributed articles very positively to our newsletter in order to inform their present activities and their latest personal lives. And these good faith always pleases Mr. Sasakawa and OPRF staff members.

Prof. Hikima, as chairman of editorial board for newsletter and Mr. Ichikawa, as actual correspondent to all the fellows, more than 500 Sasakawa Fellows are now in one circle and the secretariat is located in the center of this network. But I myself have not found out the answer to the proposition "what is our network".

Our network is basically for our individuals, but sometime this network is very useful for your organization as well.

My present comprehension of our network is unselfish solidarity. I am sure that you learnt it is very important but very difficult to understand others beyond their nationalities, cultures and political situations.



We must have a dispute sometimes in international conference or meeting because of carrying their country's instructions, however, their controversies will never become invented to any hate.

Now I would like you to remember late Mr. Ryoichi Sasakawa's motto, "The world is one family and all humankind are brothers and sisters"

I am closing my remark by saying, wishing you all reconfirming what is our network, how shall it be. This meeting will include reports of the activities of African Sasakawa Fellows, an exchange of information on maritime affairs and discussion on how the network should evolve into the future.

Finally, let me wish you all on behalf of The Nippon Foundation and OPRF, the very best of your health and a life filled with happiness. Thank you for your attention.



Welcome Message

Nana Esi QUANSAH-SODERBERG (Ghana, 2008)

Good Morning and welcome to the first Sasakawa African Fellowship networking conference. It's a pleasure to see you all here today.

Networks are the building blocks of commerce today and the linkages that make our world a smaller and more accessible place.

The Sasakawa foundation has enabled us to enhance and develop ourselves in our respective fields of expertize and in our various countries, in addition it has given us the gift of invaluable national, regional and international networks.

Just think of the implications - in almost every sub-region on this continent we have a contact person and it doesn't finish there - in every continent of this world we have friends that we can trust.

The Sasakawa Foundation has done its part, the question now arises, as Sasakawa fellows, what are we going to do with this gift; ungratefully let it die? Or thankfully run with it, nurture it and use it to develop ourselves, our countries, our regions and our world.

This networking conference is our call to rise, our call to hold on, to build and to develop the gift that has been given to us in the form of this Sasakawa network and fellowship.

I believe all of us gathered here understand the value of blessings and gifts, as know the obligation that we have to make use of these gifts efficiently. Therefore I believe we will all rise to the challenge to make our network being a successful one.

On behalf of all the Ghanaian fellows I welcome you once more to Ghana. Thank You!

Expansion of WMU Sasakawa Fellows' Network

- Agenda 1 : Questionaire (Fellows' Activities)
- Agenda 2 : Discussion Report on Mutual Communication Via The Internet (Mutual Communication by Internet)
- Agenda 3 : Friends of WMU, Japan Newsletter
- Agenda 4 : Expansion of The Sasakawa Network



Agenda 1 : Questionnaire (Fellows' Activities)

- Ms. Felicity Aba Ankoma-Sey (Ghana 2001)
- Ms. Catherine HAIZEL (Ghana 2002)
- Mr. Samwel Kipkosgei KIPTOO (Kenya 2003)
- Ms. Tumaini Shabani GURUMO (Tanzania 2007)
- Mr. Hassan Mrisho KHERI (Tanzania 2008)

1-1. Recent Sasakawa Fellows' Activities in Respective Countries

- 1. How many WMU graduates are there in your organization? Varied, from 1 - 25
- 2. Show in the organizational chart of your organization, the department you belong to. (you may draw this on an attached sheet if space is insufficient).

Varied, but mostly maritime related Department of Maritime Affairs and Inland Waterways Marine Transport Secretariat Nautical Science Department Maritime Transport Administration Engineering Services, Port Authority Motor Vehicle Division of Port Authority Ports General Directorate of Port and Maritime Affairs Ports - Technical Division TZ Naval HQTR-AJAG/NC Ethiopian Shipping & Logistics Enterprise, Ministry of Transport Department of Biological Oceanography, institute of Oceanography, Calabar Kenya Ferry Services, Ministry of Transport 3. What are your main activities in your department? Some of activities of fellows: Protection of maritime enviroment, rivers and lakes Legal drafting, legal research, analyzing bills and memos Lecture, develop curriculum, supervise/assess students project work, conduct examinations Acting advisor to Director General on maritime issues Research and consultancy General maintenance of vessels, administration of dry-dock workforce Safety, training, administration, Ports regulation Supervising port operations of loading and discharging Legal advisor, project management, administration Coordinate technical cooperation capacity building in W&C Africa, Anglophone

Monitor vessels' arrival and departure, seaworthiness/safety



All maritime law related issues, maritime contracts and consultancy Manage company's overall activities Manage the government agency

- 4. Do you have a WMU alumni association in your country or organization? Yes/no/yes, but dormant
- 5. If your answer to (4) is in the affirmative have you ever had a WMU alumni meeting in your country or in your organization? No/yes/yes but informal
- 6. Since you graduated from WMU, have you had any opportunities to participate in the International (or regional) Conference or symposium? *Few yes/mostly no*
- 7. Were these meetings maritime related? Yes
- 8. Have you had the opportunity to attend an IMO meeting? *Few yes*
- 9. What is the procedure for selection of a fellowship candidate in your organization? Self effort/application by potential student through departmental head/no clear cut policy selection procedure but must apply through sector ministry after Fellows declaration of interest in pursuing studies, Outcome at Minister's discretion.

Application to sector ministry, but selection based on academic qualification and English proficiency results.

Depends on the staff development list, qualification and need for particular expertise Application through HRD

10. Who is the current country Focal Point? After this meeting do you intend to change the Focal Point in your country?

Cameroun – Jenette Cho Mujingni :- No intention to change; no standard procedure Ghana – Dallas Eric Laryea :- Considering change after meeting; no standard procedure

Cote d'Ivoire – Abe Ake Lazare, only Fellow

Tanzania – Tumaini Gurumo; No intention to change

Kenya – Musah Hassan Musah chosen at meeting

Madagascar - Jean Edmond Randnanantenaina; only fellow

Ethiopia – Feseha Andualem Getu

Malawi – Joseph Banda

Nigeria – Yusuf Bala

Liberia – Amos Zanwonjah

11. Do you intend to have a standardized procedure for change of Focal Point in your country and how is this going to be carried out?

Yes, and when numbers increase, not yet decided

1-2. Updating Fellows' List & its Utilization

12. What is your preferred mode of receipt of the Sasakawa fellows newsletter, hardcopy or from Fellows' website?



Hardcopy/website

- 13. What is the most effective way to gain the latest personal information on each Sasakawa Fellow such change of address or status in organization? Fellows website and/or hardcopy/group email/facebook
- 14. Have you received "Sasakawa Fellows' Directory"? *mostly yes*
- 15. Did you use it often?

Yes, when needed

16. Is it really useful?

Yes

17. What suggestions do you have to make towards the effective utilization of directory?

Frequent updates, maybe after every graduation to include new fellows and when change in status, professional/personal

More information about self on site so can know each other better

Need to know people personally through social gatherings such as these, makes for good networking

Agenda 2 : Discussion Report on Mutual Communication Via The Internet (Mutual Communication by Internet)

Prepared by : Kennedy Kishawi (KENYA 2001) StephenMwamureToya(KENYA 2002) Nana EsiSoderberg (GHANA 2008) Geoffrey GurumyenSemnoe (NIGERIA 2011) Alexander Adu-Antwi (GHANA 2012)

MUTUAL COMMUNICATION BY INTERNET

The focus of the discussions was on the availability and access to information technology in Africa, and how to use this to nurture and promote the network.

Discussions comprised the following:

Current situation of personal computer use in office or home

Internet accessibility is widespread across Africa in varying degrees. There are various service providers to choose from. Some cut across countries like Vodafone, MTN,GLO while others are only peculiar to certain countries like Safaricom, Etisalat. All corporate organizations of the African fellows have provided staff with computers i.e. desktops, laptops and phones to facilitate their corporate activities.

The Africaresearch library published statistics on internet users for the 2^{nd} quarter of 2012 this included the following:

Country	Population	Internet Users Decembr 2000	Internet Users 30 th June 2012	Penetration % of Population	Internet % of Africa	Facebook Usage 31 st December 2012
Cote Divoire	21,952,093	40,000	968,000	4.4	0.6	n/a
Ghana	25,292,390	30,000	3,568,757	14.1	2.1	1,630,420
Togo	6,961,049	100,000	356,300	5.1	0.2	11,720
Tanzania	46,912,768	115,000	5,629,532	12.0	3.4	705,460
Nigeria	170,123,740	200,000	48,366,179	28.4	28.9	6,630,200
Cameroon	20,129,879	20,000	1,006,494	5.0	0.6	562,480
Ethiopia	87,302,819	10,000	960,331	1.1	0.6	902,440
Madagascar	22,005,222	30,000	418,099	1.9	0.2	282,880
Malawi	15,323,044	15,000	716,400	4.4	0.4	203,840
Kenya	43,013,341	200,000	12,043,735	28.0	7.2	2.045,900
Liberia	3,887,556	500,000	116,637	3.0	0.1	n/a
Africa Total	1,073,380,925	4,514,400	167,335,676	16.0	100.0	51,612,460

Expansion of WMU Sasakawa Fellows' Network



Almost all corporate organizations of the African fellows present at the conference had provided staff with computers i.e. desktops, laptops and phones to facilitate their corporate activities. All fellows also had personal or home access to internet via a combination of desktop, laptops and phones. With the exception of one fellow all personal i.e. home use were funded by the individuals to the degrees listed below:

Country	Work / Cost	Home	Internet Cost per Month	Limitations	Internet Service Provider	Percentage of salary
Ghana 2	Desktop/ laptop/ corporate	Desktop	100 USD	Unlimited And Corporate restricted during the day	Main one / Vodafone	6.8%
Cote d'ivoire	Desktop		20 USD		Mtn orange	3.0%
Kenya	Shared Desktop/ Personal Laptops/ corporate	Laptop and Phones Ipad	60 USD	By traffic for Limited and Unlimited wireless connectivity	Orange/ safaricom/ Airtel/Yu	5.0%
Tanzania	Desktop	Laptop	20 USD	Restricted at office / unlimited outside office	Varies with the individual	4.0%
Ethiopia	Desktop and Laptop	Laptop Phones	$25 \mathrm{USD}$	Frequently interrupted access	Ethiopia Telecommunications	2.0%
Nigeria	Desktop Laptop	Laptops and Phones	20 USD	unlimited	Mtngloetisalat	1.5-2.0%
Madagascar	Desktop / Laptop	Laptop	60 USD		Orange, idma, airtel, blueline	15.0%

USE OF SOCIAL NETWORK

The consensus is that social network would help fellows to communicate and share information quickly and in a cost effective way and thus build the African fellows network and promote the Sasakawa and OPRF foundation. The discussed benefits of the social networking platforms include :

- The high number of users
- The ability to communicate in real-time
- The user friendly and easy way to upload data audio and video files
- Ability to generate quick support for causes.

Recommended media platformsincluded Facebook, OPRF platform, LinkedIn and Whatsapp Noted Limitations of using the social networking platform to promote fellowship activities included

- Restricted access in some corporate organization
- Technical limitations where certain platforms could not be accessed on certain devices.
- Interruption in internet services in very few cases



Based on the limitations above the following were resolved:

- To use the OPRF platform to interact with other African and international fellows
- To assess the possibilities of creating a facebook page linked to the OPRF platform for fellows to interact and communicate, since this is the most widespread platform
- To start a thread on linked for more corporate activities and professional discussions
- Subsequently connect on whatsupp via mobile phones to facilitate texting, calling and transfer of data and video files via mobile phones.

FRIENDS OF WMU JAPAN WEBSITE

The fellows agreed that the Friends of WMU is a meaning of updating fellows on the activities and achievements of other fellows and also on current developments in the maritime sector. Access of the website can be used to promote the network based on the following:

- Fellows are required to update their personal information with relevant changes
- · Fellows will be required to contribute more in terms of articles
- Fellows who have forgotten their usernames and password should send an email to the coordinator Shinichi Ichikawa for a reminder.

PROPORTION OF SMARTPHONE USAGE

In Africa 76% of African business professionals use smartphones (African business panel, November 2013) however it is difficult to evaluate the proportion of smartphones use by the general populace since there isn't much data on the subject. However, we can estimate between 40 and 60 percent of the population in the respective countries use these while general phone usage on the other hand is very high. Though the focus is on how it aids work an observation was also that Smartphones seem to be more used by young people, mainly students and middle aged than old people.

Over 70% of the fellows present were on smartphones.

CONCLUSION

All fellows agreed that Information technology is a quick and efficient way to communicate; network and get things done and if used well will enable the Africanfellows' network to grow sustainably. All fellows are required to make an effort to update and communicate both socially and professionally with colleagues via the chosen media, especially the friends of WMU Japan website and Facebook. This we believe will develop the network and our region as well, as a foundation to further strengthening the international networks.
Agenda 3 : Friends of WMU, Japan Newsletter

Prepared by : Mr Mussa Hassan MUSSA (Kenya 2000) Ms Stella Joshua KATONDO (Tanzania 2001) Mr Jack okonSHOWELL (Nigeria 2004) MrFesehaAndualemGETU(Ethiopia 2007)

1) Does every Fellow in your country receive the Newsletter every three months?

Most of the Fellows attending the Network Meeting responded positively to this question that everybody is receiving soft copy and hard copy with the exception of two members whom their records have now been adjusted.

Action taken : We are advising fellows to continuously update their contact information electronically to the OPRF Secretariat.

2) What kind of articles is interesting for you?

- Responds to this question varied, as listed below :
- Contribution from a fellow known to the reader
- Socialissues ; Humor, Updated information as regard family matters etc.
- His Excellency Sasakawa's activities
- Recent development in maritime affairs
- Ship Construction
- Port Improvement
- Current / New Maritime events
- Current Maritime Engineering aspects
- ICT utilization in Maritime Industry
- New development in Piracy
- Maritime accidents
- The Sasakawa Network meeting in Nov. 2013
- Seafarers Issues
- Ocean Governance
- Maritime Security
- Maritime safety
- Environmental Issues
- We suggest that the Newsletter include items like ; mind teaser, crosswords, logical puzzles in respect to Maritime matters etc.

3) What if you decide to contribute an article, what topic would you choose?

Answer : Answers in the list above were responses to this question as well.



4) Howto collect contribute articles from Fellows inrespective countries?

- Answer : Each individual should send his/her contribution direct to the OPRF Secretariat/ Editorial board
- 5) How to utilize the newsletter for the purpose of promotion of our network? What topic would you suggest?

Answer : Newsletter can be utilized to announce and report on the various activities from respective regions by both Sasakawa fellows and respective institutions in the maritime sector.

6) In March 2015, our 50th issue of Newsletter will be printed. Any suggestions / ideas for this memorable 50th issue

 $Most\ recommended \ \vdots$

- O To include Mr. Yohei Sasakawa's Activities / Contribution to the Maritime World
- O To hold the WMU Sasakawa Fellows Africa Regional Network Meeting before the Anniversary date so that to include the event in that issue
- O WMU Sasakawa Fellows Dissertation

Agenda 4 : Expansion of The Sasakawa Network

Presented by : Mr. Yusuf Mohammad BALA (Nigeria 2008) Mr. Amos Lasanna SANWONJAH (Liberia 2000) Mr. Jean Edmond RANDRIANANTENAINA (Madagascar 2010) Mr. Stephen Mwamure TOYA (Kenya 2002) Mr. Dallas Eric LARYEA (Ghana 2011) Ms Jenette Tifuh MUJINGNI CHO (Cameroon 2012) Mr. Joseph Sheketeni BANDA (Malawi 2012)

Discussions during the fourth session were based on the expansion of the Sasakawa Africa Network. The objective was to examine possible ways by which our network could be expanded in the future. The following guiding questions and answers were deliberated and unanimously agreed on:

1. How often do you contact your classmate/graduates? (Email, phone, letter etc...):

Contact with other classmates was regular during the period immediately after graduation but the frequency reduced in some cases to not at all and in most cases now only when there is a need for information to be sorted. To others, contacting a classmate depended on how close they were while at WMU. However, the class of 2011 and 2012 have an account on Facebook, therefore are in contact practically daily.

2. How to build up a closer connection with other Fellows (Domestic / Overseas):

The use of Information Technology came up as the best means to build up a closer connection with other Fellows. Social media such as Facebook, Skype, WhatsApp, etc... were highlighted as the most common. It was therefore recommended that, there is the need to start building a strong WMU alumni within each country, with regular meetings and using that platform as a spring board for the larger Sasakawa network.

3. Future scheme for the network activities in each country:

Starting and sustaining a Sasakawa Fellows' national network within each country and integrating it with WMU Alumini Association at the national level, organize exchange programmes and proposing to OPRF a biannual African Sasakawa meeting, were cited as the future scheme for network activities in each country.

4. What kind of activities should we carry out in order to maintain this Sasakawa Fellows' Network more effectively?

Activities like the World Maritime Day celebration, seminars or workshops on maritime issues could be organized by the local network to keep them together. Some Fellows in the region could also be invited to participate in such activities.



5. Describe the necessity of this Sasakawa Fellows' Network concretely: utility, benefits, profit, usefulness and so on.

The network is one of the best things that happened in the lives of Fellows and some of the benefits that were expressed are professional & personal utility, source of information, connection & network platform, tool for promoting unity etc. Fellows attested that they can visit each other's countries, be it for work or business and feel at home because of the presence of a Fellow in that country. It was also said that some benefits of the network could be valued in monetary terms since information procured from a Fellow could be paid for, if the services of a consultant was sorted.

6. How we get involved with retirees, immigrants and overseas residents.

Some ways of getting involved with retirees, immigrants and overseas residents were cited as follows:

- -Local network in each country should make an inventory of the above groups of Fellows in their countries and reintroduce them to the OPRF secretariat.
- -The OPRF can identify these Fellows encouraging them to update their contact information both in the Friends of WMU Japan website and the Fellow's directory.
- -Information about these Fellows could be sorted from the wider WMU alumni in each country.
- -They could also be invited to participate in the local, regional and international network activities and meetings.
- -A Facebook search will be valuable if the person has a Facebook account.
- -The IMO regional coordinator for West and Central Africa (Anglophone countries) should use his position to locate some of these Fellows.
- -Fellows may also contact fellows in any country they find themselves either for business, pleasure or immigration reasons.

CONCLUSION:

It is very important for the Sasakawa network to expand worldwide. Fellows are advised to keep in touch with each other frequently and search for information about all fellows in their respective countries who are retired or have migrated to other countries and bring them back into the network. National networks should be created as well, no matter how many Sasakawa fellows are present in each country.

Furthermore, in everything we do, we should always bear in mind the words of Mr. Rioyichi Sasakawa who said "The World is a family and all mankind are brothers and sisters".

Exchange Information on Maritime Affairs

WMU SASAKAWA FELLOWS' NETWORK MEETING IN THE AFRICAN REGION

- Maritime Education & Training
 - 1. Training, Recruiting Seafarers And Upgrading Traditional Fishing Methods in Liberia
 - 2. Career Related Maritime Issues
- Piracy & Law Enforcement
 - 1. Piracy and Armed Robbery Against Ships On Waters Under National Jurisdiction
 - 2. Piracy in West Africa -A close look at Ghana-
 - 3. Tanzania Peoples Defence Forces
 - 4. The future and West African Maritime Safety Agency (WAMSA)
- Maritime Environment
 - 1. Garbage Management in Cameroon
 - 2. Environmental Impact of Maritime Activities in Nigeria : Measures and Challenges
- Transport & Logistics
 - 1. Kenya Ferry Services Limited
 - 2. Development Ofinland Water Transport in Malawi
 - 3. Cabotage Its Implications and Potentials
- Ports & Maritime Industries
 - 1. Exchange of Information on Maritime Affairs Madagascar
 - 2. Dar Es Salaam Port
 - 3. Kenya Maritime Industrycountry Report
 - 4. Current Situation of Sea Transport in Ethiopia

Training, Recruiting Seafarers And Upgrading Traditional Fishing Methods in Liberia

Amos Lasannah ZANWONJAH, Liberia

Introduction

Liberia is the second largest maritime nation in the world. It is found in West Africa, between Cote D'Ivoire, Sierra Leone, and Guinea. Liberia is home to more than 509 petroleum tankers, most of which are foreign. Liberia is a fertile country with unlimited mineral resources, water, forests and a favorable climate for agriculture. Being a country rich in waters, Liberia heavily relies on maritime resources as a revenue income. The Maritime resources being the biggest source of income in this country, Liberia has with time developed its infrastructure to help conform to the rising demand for transportation of goods. It has also had to keep up with the rising competition and has managed to amass more than 1700 vessels registered under its name.

In 2010, Liberia signed into law, the Liberia Maritime Authority Act of 2010 which sought to bring a new, efficient and dynamic maritime in the world. The transformation of the Liberia Maritime Authority, opened more business opportunities to the rest of the world as it restored confidence, trust and faith in the system. This attracted most of the foreign tankers and vessels to invest more in Liberia. At the moment. Liberia is one of the few countries which have set up an Independent Association of Ship owners. Liberia, being located in a central place and connecting almost the whole of West Africa, it is in a good position to be used as a gateway to many nearby countries, making it a portal state. Apart from licensing vessels, the Liberia Maritime Authority also licenses the crew and provides certification of ships for safety. This also makes Liberia one of the top maritime countries with a minimal number of sea accidents.



Training and Recruiting Seafarers

Training of seafarers is important for a country like Liberia, because of the increasing vessels being registered under its name. Hiring qualified personnel is important, because they are likely to cause few accidents. There are a number of minimum requirements that qualify one



to work as a seafarer. The first requirement is that one has to be 16 years and older to work in the vessel, and 18 years and older to work in dangerous areas and at night. This helps to limit child labor and exposing young children to the dangerous waters. One has to identify himself with the recruiting agency to ascertain his age before being hired. The second requirement is that one has to be medically and physically fit before being hired. This limits hiring of persons with disabilities and chronic diseases which cannot allow them to work after being exposed to the different weather seasons. This also gives the hiring company a chance to provide for health and medical care for its staff. One is supposed to provide a medical check up to the hiring company for assessment. Lastly, the personnel to be recruited must be trained on the various issues he is supposed to handle. For instance, the crew should be trained on all matters relating to the vessel since they are in the vessel most of the time. They should be trained on how they should handle the vessel when the engine fails to start or when the tides are high. After the training, it is better to certify them so that it is easy to differentiate between the trained one and the one who is not. After training the seafarers, they need to be recruited by the shipping companies. Different companies offer different sets of recruitment policies. There should be a contract between the shipping company and the seafarers. The contract should be valid, legal, clear and enforceable by law. This means that both the shipping company and the seafarer should agree before signing the agreement. The seafarer should accept the terms and conditions of the shipping company, while the shipping company should also accept the conditions of the seafarer. The contract should also be legally enforceable that the information in the contract is legal and does not contravene the rule of the land. The amount which the shipping company will pay to the seafarer should be stated and paid in at least a month's time. This is the reward the shipping company gives the seafarer for the job he has done for that month. If the shipping company does not honor this, the seafarer is allowed by law to sue them.

The seafarer is also entitled to rest hours in a normal day of 24 hours. He should not work more than 14 hours. This is an advantage to the shipping company since a tired seafarer is prone to accidents. The seafarer room makes more creative and productive in resting time. The rest hours cannot be divided into two. In any way, they should be continuous for at least six hours. The seafarers are also entitled to an annual leave as well as a shore leave. This should not be exchanged for pay since a seafarer needs to rest from work once in a year as it revives his energy when he returns. Most seafarers work in different countries which are not their homelands. Repatriation should be free to the seafarers any time they feel like visiting their resident countries. At times, ships may be lost or foundered. The seafarers are entitled to unemployment payments resulting from the loss unless they are directly involved in the loss.

Upgrading Traditional Fishing Methods

Traditional ways of harvesting included the use of trawls, gill nets, hook and line, traps, pots, trammel nets, shore seine, dip net and others, but they never get the increasing demand for fish. In many instances, for example the gill nets could trap fish that were not old enough for the market, thus reducing the population and disturbing the ecosystem of the fish. The other forms of fish harvesting like the use of traps also proved beneficial when one was lucky since fish could

Maritime Education & Training



not come on that way easily. This has led to the upgrading of the harvesting methods which also cater for a balanced ecosystem of the fish and also increasing the production of fish. Some of the upgraded methods include trawling, purse seining and trolling lines.

Conclusion

Liberia is on the countries with the potential of having the best maritime economy in the world. Apart from the maritime industry, it is also capable of becoming the regional economic powerhouse as it opens West Africa to the world. This can be best achieved if it maintains an efficient, clear and effective Maritime Authority. Training and recruitment of seafarers is a aspect key in maritime business. Besides offering job opportunities to the seafarers, the shipping countries also improve on the services offered since the personnel employed are qualified. This also reduces the number of accidents. Fishing is a economic activity key to many countries in Africa. Hence, upgrading of the traditional methods of fishing will prove worthwhile in improving the quality of fish harvested and also maintaining a balanced ecosystem.

Thank you!





CAREER RELATED MARITIME ISSUES

Yassin Magongo SONGORO, Tanzania Tumaini Shabani GURUMO, Tanzania

A. Introduction

I am a lawyer by profession. Currently, I am a lecturer at the Dar es Salaam Maritime Institute. Maritime law and policy have become my specialty since I graduated at WMU. Ever since, I have been occupied in research and consultancy in the maritime industry. Therefore, in this paper I will not confine myself to maritime issues in the academic arena, but I will cut across issues related to maritime administration and guiding principles.

B. Major maritime issues

i. Human resource shortage

There is a short of manpower in the maritime industry in general. Starting with , education and training, Dar es Salaam Maritime Institute (DMI) is the only institution in Tanzania competent to offer maritime education and training in accordance with internationally accepted standards. Nevertheless, DMI is in need of significant number of qualified and experienced manpower to train seafarers and cater for the vast country needs for maritime knowledge.

Maritime industry in Tanzania, if fully developed and better managed, could be the major contributor to the GDP of the country taking into consideration rich opportunities that are available in the industry and the strategic location of the country. However, in many areas there is inadequacy in maritime expertise therefore a little of insignificant research to address development of maritime industry. The growing natural gas industry, potentials for oil industry, need to entirely address marine environment issues and issues pertaining to maritime safety and security are just a few areas that indicate the need for adequately qualified and specialized maritime personnel.

Equally, there is a need for legal practitioners with special knowledge of maritime industry. As we are embarking on legal proceeding on maritime security issues, we need judges, magistrates and attorneys who are well equipped with knowledge of the subject matter for effective discharge of respective duties.

ii. Gender disparity in the maritime industry

Apart from the shortage of maritime personnel, the situation is even worse when it comes to gender inequality in the maritime industry. As we are living in a gender conscious era, it is not difficult to notice the gap between the number of men and women participating in the maritime industry.

Starting with DMI as a specialized institution for maritime education and training, the number of female students is only a pinch of salt in the ocean comparing to the number of male students especially in Certificate of Competency (CoC) courses. This can be evidenced in the SUMATRA list of Tanzania CoC holders where there are five (5) female officers only comparing to over 800 male Officers. The same trend applies to lecturers at the Institution.

Outside training institution, there are no improvements that one can notice. In most ships, companies, government offices, conferences, meetings, congregations that involve maritime personnel it is easy to notice the few women in the maritime profession.

On the other hand, it has not been easy to influence women to join maritime professions. From time immemorial maritime issues have been portrayed as masculine issues that do not fit well with women. Nevertheless, in this era there are a variety of opportunities for women in the maritime industry not only onboard ships but also ashore.

iii. Lack of comprehensive maritime policy

A comprehensive maritime policy gives direction of the maritime industry in a respective country(s). The absence of a comprehensive maritime policy could be a hindering factor for development of maritime industry.

In Tanzania, there is maritime transport policy that forms a part of the Country's Transport policy. Even the incorporated maritime policy does not comprehensively address issues pertaining to maritime transport. Consequently, maritime industry issues are addressed generally across other policies without taking into consideration its peculiarity. By doing so, maritime issues tends to be addressed insufficiently by personnel without special knowledge on respective maritime areas. Also, maritime issues tend not to be given proper weight they disserve.

iv. Complex maritime administration system

Maritime administration is an important factor in the effective implementation of respective national law and policy as well as international agreements.

Tanzania maritime administration is rather complex due to the nature of the country system. Currently, such complexities in the maritime administration have caused unsatisfactory management of maritime matters especially on the safety of ships. Surface and Marine Transport Authority (SUMATRA) and Zanzibar Maritime Authority (ZMA) need to work closely together to sustain maritime safety as an international duty.

C. Conclusion

The above highlighted maritime issues are not a comprehensive list but rather the most close to my working experience in the maritime industry in Tanzania. Besides, I am of the view that effectively addressing issues of manpower, policy and administration is potential in as far as development of maritime industry in Tanzania is concerned.

PIRACY AND ARMED ROBBERY AGAINST SHIPS ON WATERS UNDER NATIONAL JURISDICTION

Lazare Aké ABE, Cote d'Ivoire



I. Overall presentation of Cote d'Ivoire

1. Maritime geographical opportunities

The Republic of Cote d'Ivoire is located in West Africa on superficies of 322.462 sq. km. She is boarded by Mali and Burkina Faso in the north, by Liberia and Guinea in the west, by Ghana and the Atlantic Ocean in the south. The overall population is about 22 million people.

Cote d'Ivoire possesses a maritime space of 520 km long and an EZZ of about 203,700 sq. km from east to west. Besides, there are inland waters areas composed of lagoon, rivers and lakes.



2. Maritime economic opportunities

Cote d'Ivoire is located on the shipping route from Europe/America to Asia via the Cap on Good Hope. As such, it represents a cross road for importation, exportation or transshipment of goods from America, Europe and Asia.

Cote d'Ivoire has two main ports: the port of Abidjan, the most important, and the port of San Pedro. After a decrease of -3.4% observed in 2011 because of the social and political crisis, the Abidjan's port traffic increased to +30.5% in 2012. It is the sign of renewal dynamism in economic



activities in the aftermath of the crisis as confirmed by following statistics of Abidjan's port:

- Ship's traffic (mainly container ships, general cargos, tankers, bulk carriers and Ro-Ro): 2914
- Overall port traffic (oil, general cargos and fishing products) : 21,713,810 tons (13,612,599 for exports traffic and 8,101,211 for import traffic)
- Container traffic (full, empty and transshipped) : 633,917 EVP
- Transshipment traffic
- Transit traffic, mainly from and to Burkina Faso, Mali and Niger: 1,613,132 tons.

We can see by these statistics that the Port of Abidjan and shipping activities in general play a great role in the overall economic activities of Cote d'Ivoire. In fact, the only port of Abidjan's represents:

- 90% of customs incomes ;
- 60% of public income (customs duties and taxes);
- \blacksquare 65% industrial units of the country;
- 50,000 employees;
- 70% of the Gross Domestic Product;
- 70% of foreign exchanges of hinterland countries (Burkina, Mali, Chad, Niger, Guinea).
- Important tool of cooperation and integration in West Africa.





II. Armed robbery of ships on the waters under national jurisdiction

According to the statistics of the International Maritime Bureau (IMB) from 2003 to the first three months period of 2013 (January-February-March), armed robberies against ships on water under national jurisdiction amount to a total of 27 actualy attacked. The nature of the attacks evolved deeply from 2003 to 2013.

1. Before the year 2012

The number of attacks from 2003 to 2011 amount to 20. The nature these attacks is what we can call "subsistence piracy". Some people living in difficult social conditions living sometimes

Solution

in shantytowns near the port, board ships when at anchorage, sometimes with knives and machetes, just in order to steal what they can have on the bridge (stores, cables and paints).

On 30th January 2008, a Marshall Island bulk carrier MT Go Friendship was boarded by two robbers while was in inner anchorage. They stole ship's stores and escaped.

2. In the years 2012-2013

Along with the outbreak of piracy on the coast of countries bordering the Gulf of Guinea, we have recorded five cases of armed robbery against ships in 2012, and 3 cases from January to March 2013.

On 5th October 2012, a Bahamas flagged product tanker MT Orfeas was hijacked by armed pirates while anchored at about 3 nm south of Abidjan port anchorage at approximately 2330 LT. Fourteen pirates in speed bots armed with AK 47 rifles and knives Piracy statistics in Côte d'Ivoire



boarded and hijacked the tanker. They damaged the ships' communication equipment and sailed the tanker to an unknown location off the Nigerian coast where part of the cargo where transferred into another tanker. The tanker was in pirates control for around ten days. The pirates ransacked the vessel and stole crew personnel belongings and cash before leaving the tanker on 9th October 2012.

On 3rd February 2013, a Luxembourg flagged tanker MT Gascogne was attacked and hijacked by armed pirates while steaming at about 70 nm south of Abidjan at approximately 0659 LT. About twelve pirates heavily armed with guns boarded the tanker underway. The pirates used a foldable ladder equipped with hooks to board the tanker. They hijacked the tanker and took all 17 crew members as hostage. They then sailed the tanker to off Nigeria where they stole the tanker's cargo. They also ransacked the vessel and stole the vessel's and crew's valuable. The tanker and the crew members were released on 05 February 2013. Two of the crew members were injured. The tanker then proceeded to safe port.

On 16th January 2013, a Panamanian flagged product tanker MT Itri was hijacked by armed pirates



Piracy & Law Enforcement



at Abidjan anchorage at approximately 2200 LT. Armed pirates attacked and boarded the tanker. They hijacked the tanker and took all 16 crew members as hostage and sailed her to an unknown location. The pirates then stole crew's and vessel's valuable and her cargo. The vessel and all crew members were released unharmed on 22 January 2013. The tanker then proceeded to Lagos port for further investigation .

When we analyze the characteristics of piratical attacks, we can notice following elements:

- The most of attacked ships are tanker;
- The most of ships were boarded when in inner or outer anchorage;
- Pirates used speed boats to approach the vessel and ladder with hooks to board it;
- During attacks, pirates used gun and knives;
- Crew were assaulted, taken hostage and threatened but not kidnapped for ransom;
- The ship was sailed to an unknown location off the coast of Nigeria;
- Pirates stole part of the oil cargo, crew's and ships' valuable and released the vessel.

The overall observation is that Nigerian pirates seem to have been spread in Abidjan when we see the direct link between Nigerian pirates and armed robbery cases happened in Abidjan, as illustrated by precedent cases.

III. Short-term counter measures against armed robbery of ships

1. Emergency procedure

In all cases of piratical attacks, the Maritime Administration was first informed by the shipping agent of the ship in anchorage, when he lost contact with the ship's captain. As soon as the Maritime Administration suspected a piratical attack, it started on the emergency procedure consisting in following steps:

- i. Inform the surrounding ships through the MRCC for the purpose to find the position of the lost ship;
- ii. Inform the MRCC Liberia (Regional SAR Coordination Centre) in order to help find the
- position of the ship on the regional waters;
- iii.Inform national actors involved in the fight against piracy and armed robbery against ships (Port Authority, Police service, Gendarmerie, Navy, Customs and National Rescue service);
- iv. Launch patrol boats in order to rescue the ship and crews;
- v. Write an investigation report;
- vi.Report the event to the Ministry of Transports and the Government.

In the armed robbery cases that we faced, it was difficult to find the ship, carry out a better investigation, catch and prosecute the robbers for following reasons:

- The purpose of the pirates once the ship was hijacked, was not to rob the ship into





national waters but to bring it off Nigeria;

- Not enough patrol boats were available at the time of the first attacks;
- It was not possible after release of the ship to take the statement of the crew because none of them sailed back to Abidjan's port.

2. Short term operational measures

After the emergency procedures, it was necessary face to increasing risk of piratical attacks to better organize and coordinate all government forces involved, to give appropriate reaction to

the said risk. In that sense different operational measures have been taken:

- Evaluate and reinforce the intervention means (equipment, human resources);
- Set up mixed patrol teams composed of the Navy, Maritime Administration, and the Gendarmerie;
- Carry out patrolling activities in port areas according to the means available under the coordination of the Navy.



V. Middle- and long-term counter measures against armed robbery of ships 1. Reform of the institutional framework

The reform of the institutional framework regarding the fight against piracy and armed robbery against ships is based on two main regional strategies:

- The Memorandum of understanding on the establishment of a subregional integrated coast guard network in west and central Africa, adopted from 29th to 31st July in Dakar (MOU of Dakar), placed under the auspices of the Maritime Organization of West and Central Africa (MOWCA).
- The Memorandum of understanding on the establishment of a regional



strategy for maritime safety and security in Central and West Africa, adopted in Yaounde on 24th and 25th June 2013 (MOU of Yaounde), placed under the auspices of the CEEA, ECOWAS and the Commission of the Gulf of Guinea.

The MOU of Dakar organizes the States of West and Central Africa in a network of four (04) Coastguard zones with respective four (4) Coastguard Zonal Coordinating Centres and two (2) Principal Coordinating Centres (art. 12 of the MOU):

- Zone 1: Mauritania, Senegal, Gambia, Guinea Bissau, Cabo Verde.



- Zone 2: Guinea, Sierra Leone, Liberia, Cote d'Ivoire, Ghana.
- Zone 3: Togo, Benin, Nigeria, Cameroon, Equatorial Guinea.
- Zone 4: Gabon, Congo, DRC, Sao Tome & Principe, Angola.

In each zone, a Coordinator is in charge of operations in his/her zone, according to Principal Coordinator's instructions and orders.

The coastguard coordinating center of the Zone II is located in Cote d'Ivoire. Last year, we held the first meeting of countries belonging to the Zone II. The aim of this meeting was to adopt the basic legal texts necessary to make this coordination functional. We are still in the process and the center is still not operational.

On the other hand, Heads of the States of West and Central Africa meeting in Yaounde have adopted a regional strategy in the fight against piracy and armed robbery against ships. The objective of this meeting is to implement a political, institutional, legal, financial, procedural and operational framework in order to better organize and coordinate at a regional level the fight against threats of security in the Gulf of Guinea.

The MOU of Yaounde have established at the said city a Regional Coordinating Operational Centre for the fight against piracy and armed robbery against ships.

However, in order to better take part to the regional processes established either in Dakar or in Yaounde, it was necessary to organize the coordination of coast guard activities at a national level between the different actors involved. It the reason why the National Commission of Security set out a strategy to better coordinates on a political and operational level the action of the State on sea.

The signature of a decree by the Government is on course. This decree will establish an institutional framework and an operational strategy of coast guard under the coordination of the Navy including all other administrations competent at sea.

The other forces and administrations selected to participate in the coordination of the action of State on sea are the Maritime Administration, Customs Administration, Police and Gendarmerie, the Fishery Administration and the Antipollution Administration.

2. Reform of the legal framework

Cote d'Ivoire is party to the UN Convention on the law of the Sea (UNCLOS) of 1982, which in its article 101 give a definition of piracy. According to this definition, an act of violence against a ship motivated for private interest is considered to be "piracy" only when it occurs on the high seas or a place outside the jurisdiction of any State.

Then, in the seas under national jurisdiction (EEZ, territorial sea, contiguous zone) the law applicable when a ship is robbed is the coastal state law. In Cote d'Ivoire, the applicable law is the Code of Merchant Marine. Face to the evolution of maritime law, the Code of Merchant Marine has become out-of-date on some aspects including the definition of piracy.

For example, article 229, paragraph 1 defines "piracy" as :

"Any person, member of the crew of an Ivorian ship, who commits armed violence or depredation either against ships under national registry or against foreign ships of any State not in war against Cote d'Ivoire".

SOPRF

This definition is no longer compatible with the reality and the modus operandi of today's piracy. A legal reform was necessary. It the reason why a new maritime code, taking into account a better definition and management of piracy, has been drafted and will soon be adopted by the Parliament.

3. Reinforcement of patrol equipments

The Government has adopted in 2012 the National Plan of Development of Cote d'Ivoire. This plan has integrated a maritime safety and security component aiming to equip the maritime administration and other administrations with logistics means in order to combat more efficiently security threats. Within this framework, the Government carried out different initiatives at a bilateral and multilateral level to acquire the necessary equipment, composed of the following:

- Patrol boats
- Vehicles
- Radio-communication means (AIS, VTS, VTSM)
- Building of the regional coordinating center
- Building of local services on the littoral
- Human capacity building in the field of safety and security.



Conclusion

Piracy and armed robbery against ships sailing on waters under national jurisdiction has become an increasing problem for the promotion of the maritime economy in Cote d'Ivoire. This situation prompted the government to implement a real reform of the political, institutional, legal and operational framework at the national and regional level in order to eradicate this phenomenon.



PIRACY IN WEST AFRICA A close look at Ghana

Nana Esi QUANSAH-SÖDERBERG, Ghana

Piracy is defined as:

Any illegal acts of violence or detention, or any act of depredation, committed for private ends by the crew or the passengers of a private ship or a private aircraft, and directed: on the high seas, against another ship or aircraft, or against persons or property on board such ship or aircraft; against a ship, aircraft, persons or property in a place outside the jurisdiction of any State;

- (b) Any act of voluntary participation in the operation of a ship or of an aircraft with knowledge of facts making it a pirate ship or aircraft;
- (c) Any act inciting or of intentionally facilitating an act described in subparagraph (a) or (b)."

Armed robbery on the other hand is defined as "Any unlawful act of violence or detention, or any act of depredation, or threat thereof, other than an act of piracy, directed against a ship or against persons or property on board such ship, within a State's jurisdiction over such offence Source: IMO International Maritime Organization

West African waters have become unsafe. Between 2008 and 2012 the African continent recorded 1151 piracy attacks. About 19% of these were West African (221) cases. The highest incidences were recorded in Nigeria, followed by Ivory Coast and Togo. Ghana initially recorded high numbers in 2008, but this has declined to 0 within the half year of 2013. Refer to Figure 1 and table 1.



SOURCE: ICC IMB PIRACY AND ARMED ROBBERY AGAINST SHIPS ANNUAL REPORT 201

Figure 1 Proportion of Piracy Attacks Within Areas in Africa

COUNTRY	2008	2009	2010	2011	2012	TOTAL
Benin		1		20		21
Ivory Coast	3	2	4	1	5	15
Ghana	7	3	0	2	2	14
Guinea	0	5	6	5	3	19
Guinea-Bissau	0	1	0	0	0	1
Liberia	1	0	1	0	0	2
Nigeria	40	29	19	10	27	125
Togo	1	2	0	6	15	24
Total	52	43	30	44	52	221

Table 1 Actual and Attempted Piracy Attacks In West African Waters

Source: ICC IMB PIRACY AND ARMED ROBBERY AGAINST SHIPS ANNUAL REPORT 2012

While piracy in other areas is declining, cases in West Africa are increasing (see figure 2), making the shipping route dangerous and unattractive. The problem which originally occurred mostly in Nigeria has over the years spread to neighboring coastal countries.

The cases of piracy in West Africa range between armed robbery at sea and piracy where armed robbery is defined as acts of violence or detention against persons or property on board a ship within a state's jurisdiction, and piracy are the same acts of violence or detention which occur on the high seas outside any states jurisdiction (paraphrased from IMO definition of piracy and armed robbery).

The initial spate of occurrences along the West African coast - and especially in Ghana seemed to be opportunistic armed robbery with theft of cargo or unsecured items available on stationary or anchored vessels within port anchorages. This was characterized by the use of fishing canoes or small boats fitted with outboard motors.

Reports from other West African countries indicate evolution of these cases to actual hijacking of vessels and theft on the high seas even when vessels are steaming, especially within Nigerian waters. (SAFETY 4 SEA, 2013)

Even more disturbing is the increase in violence, maritime kidnapping and hostage situations in Nigeria, Togo, Benin and Ivory Coast. While piracy on the African Horn has largely been about negotiating ransom for hostages and taken ships, the West African cases are more about relatively swift attacks where the objective is to quickly take what is readily available and kill the crew if necessary.



SOURCE: ICC IMB PIRACY AND ARMED ROBBERY AGAINST SHIPS ANNUAL REPORT 2012

Figure 2 Actual and Attempted Piracy Attacks in West African Waters from 2008-2012



Causes of piracy within the West African region

- Socio economic conditions are a two pronged cause. Booming commerce and trade with mineral resources such as oil and gas attracts criminals with the potential rewards of lucrative bounty. On the other hand poverty and unemployment, especially with regards to people resident in coastal areas serve as a catalyst for taking part in such crimes.
- Lax security of bordering and territorial waters and weak enforcement systems give potential pirates and robbers the opening to perpetrate their crimes.
- Success rate of piracy and armed robbery at sea in general and the promise of quick rewards make it an attractive option for people who struggle to survive. More especially the success rate of these attempts in Nigeria has encouraged expansion to neighboring waters.
- Absence of a coordinated regional maritime security initiative. Isolated efforts by national entities such as ports and navies can only go so far. The absence of structured collaboration and a cohesive effort only serves to embolden these criminals to ply their trade.

Effects of piracy on sub region and Ghana specifically

- Ship owners and shipping companies live in continuous fear of piracy attack or attempts on their vessels. Thus insurance companies have had to increase premiums on insurance to ensure adequate coverage, and ship owners to invest in different forms of security services and products. The cost of these endeavours will have to be recouped and will reflect in increased maritime and freight costs. (Bowden et al 2010)
- Ports need to secure their surrounding waters and anchorages to attract maritime traffic. The security activities also encompass the maritime boundaries of a country albeit through collaboration with other national agencies and institutions. Thus the increased occurrence and threat of piracy warrants allocating greater resources to maritime security, instead of investing in forward looking areas such as customer support and port expansion.
- Re-routing of vessels to avoid pirate prone areas causes delays in vessel arrivals and cargo clearance. The delays and increased cost of transportation has the tendency of making the West African region and consequently the ports of Ghana unattractive for transshipment and oil services which is in direct contradiction of our plans to respectively make Tema and Takoradi Ports the maritime hubs of the sub-region.
- Pirate hot spots within the region would make Ghana potentially unattractive to major shipping lines and thus most of the country's traffic may be re-routed via transshipment from other ports reducing the flow of vessel traffic, reducing the size of vessels and limiting the level of revenue from port dues and other related charges to the port authority. Consequently this will also cause loss of national revenue and GDP to the nation.

Existing initiatives to address the problem so far comprise the following: Respective initiatives by regional ports

The Ghanaian case

The ports have been a forerunner in the prevention and combating of armed robbery in Ghanaian waters.



Some initiatives taken by the Port and Harbours Authority comprise:

- ISPS and Marsec level 1 compliance in both commercial ports
- Automated Ship Identification System.
- A New Security Patrol boat costing €1.6m was recently acquired to beef up security patrol activities in the port environs.
- 24 hour joint patrols by GPHA Security, the Navy and Police
- Continuous training of security personnel on current maritime security practices.
- Port Security vetting and monitoring of fishermen who fish within our waters.
- Collaboration with other maritime agencies.
- There have also been a number of seminars and sensitization platforms organized by various public institutions to inform the general public and the maritime sector of the dangers of piracy and armed robbery.

Initiatives by the Ghanaian Navy and Air force include:

- Defender class boats for anchorage patrols
- \cdot A 36 meter Patrol boat for coastal patrols
- A maritime patrol aircraft
- Deployment of naval personnel at ports and oil fields







These initiatives have been quite effective as illustrated below (figure 3). However, there are limitations as to the capacity of crafts, fuel and personnel, as well as the threat of potential spreading of the problem from neighboring ports with high incidences of maritime armed robbery.



IMO PIRACY STATISTICS JANUARY 2013 ? JULY 2013 (194-200)

Figure 3 Maritime Armed Robbery Reports in Ghana from 2008-2013 January-July

Piracy & Law Enforcement



The Togolese case

In June 2012, Togo issued safety regulations and best practices to all vessels calling their port and has also contracted private security services to protect vessels within its anchorage. (GARD, JULY 2013)

The Togolese navy has also undergone training with French and American counterparts.

The shipping community

The shipping community which comprises all entities who participate and have an interest in the shipping industry have issued several publications on best practices for navigating the waters in the sub region. These guidelines include:

- Best Management Practices for Protection against Somalia Based Piracy
- Interim Guidelines for Owners, Operators and Masters for protection against piracy in the Gulf of Guinea region
- Code of conduct concerning the repression of piracy, armed robbery against ships, and illicit maritime activity in West and Central Africa
- The Maritime Trade Information Sharing Centre for the Gulf of Guinea (MTISC-GOG) Among others

These initiatives and guidelines augment preventive measures enforced by port authorities and other maritime security agencies by ensuring that vessels are monitored by authorities in the region, protected and prepared for the type of incidences common to the region.

Regional initiatives

Maritime Organization of West and Central Africa (MOWCA) regional coastguard project is a proposed network of national coast guard organizations which will be coordinated by four zone centres within West and Central Africa.

ZONE	COVERAGE AREA	COORDINATING CENTRE		
Zone 1	Senegal, Gambia, Guinea Bissau Cape Verde	Dakar, Senegal		
Zone 2	Guinea, Sierra Leone, Liberia, Cote D'Ivoire and Ghana	Abidjan, Cote d'Ivoire		
Zone 3	Togo. Benin, Nigeria, Cameroon, Equatorial Guinea	Lagos, Nigeria		
Zone 4	Gabon, Sao Tome and Principe, Congo, Congo DR, Angola	Pointe Noire, Congo		

SOURCE: Maritime Security Threats and Responses In The West And Central African Maritime Region/ Gulf Of Guinea M.T.ADDICO

This initiative is aimed at prevention and response to maritime security threats including piracy and armed robbery at sea. The regional coast guard initiative would mitigate constraints faced by respective national navy and security units such as limited resources and the absence of the right of hot pursuit across borders.

Though 16 out of 20 member states have endorsed the initiative, it has not been implemented yet and thus the region is still ineffectively combating the problem on an individual



or national basis.

Ports Management Association of West and Central Africa (PMAWACA) intends to meet within the last quarter of 2013 to discuss and review the way forward for the various ports within the sub region.

International initiatives

CRIMGO - the Critical Maritime Route Program which is aimed at enhancing maritime security and governance on key shipping routes is a cross continent initiative. In West Africa the program is run from seven African coastal states including Nigeria, Benin and Togo. Though Ghana is not directly included, the initiative is beneficial in this project since it looks at correcting issues along the route our port will still benefit. (EU Commission press release, 2013)

Joint Research Centre Building Maritime Awareness

EU/Gulf of Guinea strategy will be aimed at building on and empowering local and regional existing initiatives and navies (Maritime Security Review 2013). This could be a way to build the capacity of a regional coast guard. For example there has been the initiation of a maritime police division in Ghana. Though laudable their seaside activities need strengthening. Training and equipping of this unit need to be coordinated with other similar units in our neighboring countries.

THE FUTURE

In my opinion respective actions taken by Ghana and other countries in West Africa are all well and good but inadequate to address the piracy problem holistically. Since demarcations of the seas remain theoretic and not physical the problem will not remain exclusive to one state or area. There is no exclusivity to the problem.



Diagram illustrating the associated effects of piracy and armed robbery cases on ports in West Africa (Source): own summary

Figure 4

Much as individual ports and nations may secure their anchorages and territorial waters the shipping routes leading to all these ports still remains threatened. If these routes or neighbouring ports are pirate infected and have a high occurrence of incidences the cost may finally outweigh the benefit of using them. Thus the whole region loses. It's also apparent that nations cannot and should not run initiatives in isolation.

Operators need to be informed on whom to report to and of best practices.

Navy, maritime police and the port authorities need to work closely together to determine and outline the nature, extent and frequency of patrols. Courses of action in case of threats and apprehension need to be set and training needs to be undertaken. Defined reporting lines as a way of maximizing the resources available for this are also required.

Though port authorities are constructively combating the problem, there needs to be more integration between the ports along the West African coast. Port to port communication on potential threats, distress calls, tip offs, measures, facilities and systems should be shared.

Shipping lines should be encouraged to report incidents since there is indication that the various published statistics we have access to may be understating the problem.

REFERENCES

- ICC International Maritime Bureau, <u>Piracy and Armed Robbery Against Ships</u> Cimabar Waharf. (1st January-31st December, 2011)
- Seminar on protecting our coast, piracy and its effect on maritime trade, national security and the emerging oil industry: Presentation on <u>combating piracy and armed robbery against ships</u> <u>in our territorial waters</u>, Naval Captain Emmanuel Ayesu Kwafo, Director Naval Training, (Ghana GPHA Towers 25th September, 2013)
- Allianz Global Corporate and Specialty, <u>Piracy: An ancient risk with modern faces</u> Arthur E-Mossman.(June 2009)
- 4. Port Strategy, <u>A supporting role</u> HFW's Katie Lenko. (September 5th, 2012)
- Ocean Protection Services, <u>TT: The steep curve ahead in fighting Gulf of Guinea piracy</u> Ocean. (October 7th, 2013)
- 6. Safety4Sea, <u>New IMB Piracy Report highlights violence in West Africa</u> IMB (July 15th, 2013)
- Piracy Daily, Fending <u>off pirates: Depending on West African States to help won't count for</u> <u>much</u> John A.C. Cartner. (August 26th, 2013)
- Leadership, <u>Piracy: FG Takes Measures to safeguard Vessels in Gulf of Guinea</u> Chika Izoura (September 13th, 2013)
- 9. The Guardian, African *navies meet over piracy in Gulf of Guinea* (August 28th, 2013).
- 10. Chatham House, Africa Maritime Security Adjoa Anyimadu (July, 2013)
- ICC Commercial Crime Services, <u>Piracy Falls in 2012, but seas off East and West</u> <u>Africa remains dangerous</u> IMB (Wednesday,16th January 2013)
- Africa Security Brief, <u>Navies versus coast guards: Defining the Roles Of African Maritime</u> <u>Security Forces</u> Augustus Vogel (December 2009)
- 13. Gard, *Togo implement new anti-piracy campaign measures* BUDD Group.(4th July 2013)
- The Guardian, <u>American authors laud Nigeria's anti-piracy campaign</u> Nkechi Onyedika (Tuesday19th September 2013)

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- International Maritime Organization, <u>MSC.4/Circ.194, Reports on acts of piracy and armed</u> <u>robbery against ships Issued monthly-Acts reported during January 2013</u> IMO (19th March 2013)
- International Maritime Organization, <u>MSC.4/Circ.195, Reports on acts of piracy and armed</u> <u>robbery against ships Issued monthly-Acts reported during</u> Febuary 2013 IMO (21st March 2013)
- International Maritime Organization, <u>MSC. 4/Circ. 196, Reports on acts of piracy and armed</u> <u>robbery against ships Issued monthly-Acts reported during</u> March 2013 IMO (29th April 2013)
- International Maritime Organiszation, <u>MSC. 4/Circ. 197, Reports on acts of piracy and armed</u> <u>robbery against ships Issued monthly-Acts reported during</u> April 2013 IMO (17th June 2013)
- International Maritime Organization, <u>MSC. 4/circ. 198, Report on acts of piracy and armed</u> <u>robbery against ships issued monthly- act reported during</u> May 2013 IMO, (7th August 2013)
- 20. International Maritime Organization, <u>MSC. 4/circ. 199, Reports on acts of piracy and armed</u> <u>robbery against ships issued monthly - acts reported during</u> June 2013 IMO (13th August2013)
- International Maritime Organization, <u>MSC. 4/circ. 193, Report on acts of piracy and armed</u> <u>robbery against ships annual report- act reported during</u> May 2012 IMO, (2nd August 2013.)
- 22. United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea
 Maritime Security, Presentation on <u>Maritime Security Threats And Responses In The West</u> <u>And Central African Maritime Region/ Gulf Of Guinea</u> M.T.ADDICO (New York, 23-27 June 2008)
- 23. Maritime Security Review, <u>New EU initiative to combat piracy</u> Jo.Chuter (January 11th 2013).
- Sweet Crude Reports, <u>Piracy: A West Africa leader seeks Anti-piracy force</u> Toju Vincent. (June 26th, 2013)
- Cimsec, <u>Piracy in West Africa: Preventing a Somalization of the Gulf of Guinea, Pt. 1</u> James Bridger. (December 12th, 2012)
- 26. ICC Commercial Crime Services, <u>Piracy falls in 2012, but seas off east and West Africa</u> <u>remain dangerous</u> IMB (Wednesday 16th January 2013)
- European Commission, <u>New EU initiative to combat piracy in the Gulf of Guinea</u> Press release Brussels, (10 January 2013)
- One Earth Future Working Paper, <u>The economic cost of piracy</u>, Bowden, Hurlburt, Aloyo, Marts, Lee December 2010



TANZANIA PEOPLES DEFENCE FORCES

Hassan Mrisho KHERI, Tanzania

1. Introduction of our missions

a. Navy is an organized maritime military of nation. It includes not only ship and personnel but also air, missile force, ship yards and shore bases building and maintenance of fleets. The Tanzania Navy is a fighting service designated to defend the state against aggression at sea. The Tanzania Navy was established on the 06 Dec 71 under the assistance of the People's Republic of China.



b. The aim of this paper is to present issues which I face right now in my maritime field.

2. Area of responsibilities

The areas of responsibilities are show.









3. Jurisdiction

Jurisdiction is the Government's legal right to exercise authority over its persons, vessels, and territory.

3 elements comprise Jurisdiction in MLE (Maritime Law Enforcement) context



LOCATION is the allowable extent of jurisdiction over persons, vessels, and aircraft is determined by the character of the waters they are in or over. Simply put, location is a determining factor in jurisdictional assessment.

- · Foreign persons or vessels
- Persons or vessels of your
- Stateless Triangle vessels

Status is the claim of nationality that can be verified by a valid document, verbal claim by master, or display of national flag.

Flag refers to nationality.

Coastal State refers to a nation bordering ocean waters which has the authority under international law to exercise various degrees of sovereignty over the immediately adjacent ocean waters.

Vessels exercising freedom of navigation in international waters are subject only to the jurisdiction of the flag state of that vessel.

They are not subject to boarding, search, seizure or arrest by any nation other than their flag state.





Warships, military aircraft and other government vessels or aircraft on non-commercial service have Sovereign Immunity.

- The only permissible action toward sovereign immune vessels engaged in activities that would otherwise be enforceable violations of own nation or international law is requiring those vessels to leave own nation Internal waters or Territorial Sea.
- This guidance does not restrict the inherent right of self-defense.

Stateless Vessel: vessel is not legally registered in any country and/or makes no claim. **3Ways to Make a Claim to Nationality**

- Show a flag
- Show documentation
- Oral claim by master (if it is not stated by master then it is only an indication)

Persons or vessels exempt from authority : Diplomats, Foreign military vessel



Persons / Vessels status

Laws for apply to your jurisdictional waters, which require or prohibit a specific action.



Persons / Vessels status

4. Issues / Problems

There are so many problems that I face in my working environment as far as maritime field is concerned. The following are some of the main problems that bring to me challenges in my carrier of maritime affairs.

a. Search and Rescue: This is one among the role of Tanzania Navy whenever maritime accident happened within the jurisdiction



Piracy & Law Enforcement



of our water in collaboration with other rescue forces, such as Special Force for Smuggling Prevention (KMKM), Tanzania Police Marine, Tanzania Port Authority (TPA), Zanzibar Port Corporation (ZPC). Though we have the Maritime Rescue and Coordination Centre (MRCC) established on 26 Mar 09, but the respond towards the accident become slowly due to some of the administrative barriers.



Statistic show that, more than 1000 persons lost their lives in Lake Lictoria due to accident of MV Bukoba in 1996, approximately 1000 peoples died in Spice Islander in 10 Oct 2011 at the Northern off- coast of Unguja Island as well as more than 200 died in 2012 due to MV Skagit accident near to the Chumbe Island.

- b. Boarding Operation: This is a forcible insertion of personnel that are not members of the crew by another party without the consent of the captain or crew. During the operation sometimes becomes difficult to board a large ship which normally need quick and efficiency action.
- c. Illegal Fishing: Blast fishing or dynamites fishing is the practice of using explosives to kill schools of fish for easy collection. This kind of fishing is illegal and such a practice can be extremely destructive to the marine ecosystem as the explosives often destroy the underlying habitant that support the fish. This activity takes place along the coast of populated fishermen such as Dar es Salaam, Tanga, Mtwara, Mafia and Zanzibar.
- d. Piracy: According the International maritime law, Piracy can be defined as any illegal acts of violence or detention, or any act of depredation, committed for private ends by the crew or the passengers of a private ship or a private aircraft, and directed on the high sea. The Tanzanian navy has been conducting regular patrols to ensure Somali pirates do not enter our territorial waters from deep seas. The Tanzania waters are







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not safe in terms of piracy attack. "The Tanzanian navy arrested the pirates in their skiff on 18 Apr 12 near the Songosongo gas fields.

Last October, Tanzania arrested seven suspected Somali pirates following an attack on an oil and gas exploration ship operated by Brazilian petroleum company Petrobras off the coast of the country. And last year, it ordered its army to escort ships searching for oil and gas off its coast to protect them



from pirates, who are believed to be targeting expatriate workers on exploration ships.

e. Hot Pursuit: The act of pursuing any foreign vessel suspected of violating your laws in your jurisdiction onto the high seas Hot Pursuit allows a coastal State to preserve its jurisdiction to take law enforcement action against a foreign flagged vessel that flees beyond normal jurisdiction limits after it has committed a violation of the coastal State's law.

The act of pursuing became difficult when the speed of the suspected vessel is higher than our vessel.

f. Right to Approach: The right of a warship to approach another ship on the high seas, except another warship or government owned ship not for commercial use, to determine the identity and nationality of that vessel, and to determine its status. That is the task of ascertaining the nationality of a merchant ship carried out by a naval vessel within the powers recognized by international law. A merchant ship may be invited to communicate the nationality if there is a reasonable suspicion. The request is made by warship by raising the national flag or other optical signal. If the request is not met, the military unit is authorized to shoot a shot cannon ball at the bow or, as a last resort, to make use of force. In the course of the investigation the warship can approach the mercantile suspect (the term 'Anglo-Saxon' right of approach') which did not however obliged to stay to facilitate action.



g. Right to Visit: The right of a warship to board a vessel to verify Right of Approach information or investigate vessels suspected of universal crimes. The military ship will order the mercantile to stop with radio or optical means, with recourse in the event that a warning shot (warning shot); send the ship suspected, with a motorboat, its own official control vehicle papers (Act of nationalities, role crew, logbook, etc.); run, where suspicions remain after the checking of those documents, an inspection of the ship itself. A warship which encounters on the high seas a foreign ship, other than a ship entitled to complete immunity in accordance with articles 95 and 96, is not justified in boarding it unless there is reasonable ground for suspecting that:

- (a) The ship is engaged in piracy;
- (b) The ship is engaged in the slave trade;
- (c) The ship is engaged in unauthorized broadcasting
- (d) The ship is without nationality; or



 h. Authority and Jurisdiction: Authority is the government's legal power to act. The Coast Guard must have a specific statutory basis of authority before taking LE action.
 Fundamental sources of Coast Guard enforcement authority for the Boarding Officer include: Maritime Law Enforcement (MLE), Customs, Protection and Security of Vessels, Harbors

Jurisdiction is the Government's legal right to exercise authority over its persons, vessels, and territory.

5. Conclusion

The above mentioned were some of the main challenges which I face in my current working environment regarding maritime field.

The future and West African Maritime Safety Agency (WAMSA)

The discovery of oil in states of the West African and Gulf of Guinea region increases the risk of marine pollution. The risks become higher as the volume in traffic of vessels (Tankers) increase. As such there is a greater need in the very near future to have a body whose mandate is proactive which would take on some of the responsibility of putting measures in place to minimize or as the case maybe mitigate such risks. On the basis of these, it is suggested that WAMSA (West



Geoffrey Gurumyen SEMNOE, Nigeria

African Maritime Safety Agency) is an idea whose time is fast approaching.

This agency is expected to play an active role in the area of monitoring vessel traffic, training cooperation, satellite imaging and information sharing. As stated above, the discovery of oil in some States has brought along with it some much needed economic boom as well as higher risks of oil pollution as more vessels traffic along these routes. Such risk is not restricted to the producing States but to neighboring states as well. The capacity of States to deal with such risk differs based of the wealth of each State, as evident in Nigeria being the only State in the region to have an orbiting satellite(which was acquired at a cost of overused 100M) and has been used in forecasting disasters and mapping out areas of risk. It becomes imperative that such an agency is established so as to narrow those gaps that exist especially in the areas of technical and human development.

Emphasize must be stressed that such an agency would also help in the fight against armed robbery and piracy of which the region has had 28 attacks as at August 2013¹. In 2010, there were 39 attacks, 53 in 2011 and 62 in 2012^2 . As we speak, the Gulf of Guinea now has the highest number of attacks. There have recently being conferences and workshops by the major players from these States and these talks have centered mainly on the issue of cooperation, as aptly put by Beikro.G. Rear Admiral (2013) that, "...criminals are taking advantage of our failure to collaborate at the operational and tactical levels"³. Furthermore, piracy attacks are, like oil pollution which when they occur, no respecter of boundaries and could easily spill from one state to the other. As such, synergy becomes very important if these are to be mitigated. This much has been emphasized by Frans Von Rompuy (2013), who says that the European Maritime Safety Agency (EMSA) is "helping the member States shoulder their responsibilities and taking

¹ www.icc-ccs.org

² www.cathamhouse.org

³ Conference held at Eko Hotel Lagos on Maritime Security in the Gulf of Guinea, Lagos, Nigeria



advantage of synergy opportunities"4.

Whilst the discovery of new wells brings prospects of greater prosperity for States, the increase in maritime trade due to more vessels and tankers visiting such ports presents advantages of wealth and disadvantages of danger that at some point, even with the advanced safety features of vessels, an accident may occur. Proactive measures are required to help States prepare for such emergencies and to deal with it accordingly based on international standards across the board.

Again, it costs a lot of money to clean up after an oil spill and restore the environment as close as possible to its former state and with the current economic reality, not many States in the region can afford this. Quite a number would almost certainly rely on international help or simply just allow things as they are, hoping that nature would do them a favor.

WAMSA, if established can perform such tasks seamlessly by tracking and monitoring vessels, especially oil tankers and relaying such information to the various maritime administrations. As it was stated earlier, not all the States have the resources to establish monitoring centers and since these States face the same risk, then such cooperation or synergy is best utilized through such coordination agency. The European Maritime Safety Agency is a good example of such synergy

Piracy, armed robbery and hijackings have been on the increase along the Gulf of Guinea in 2013 and reports have shown that this has spread as far as Cotonou (Benin), Lome (Togo) and Abidjan (Ivory Coast)⁵. In most cases where such incidents happen, the criminals evade arrest by crossing into neighboring States and issues of sovereignty have hampered such arrests in the case of hot pursuits. The Government of Benin has recently had to contract an American maritime security company, Davenport to handle its maritime security⁶. It is hard to fathom how such a firm would relay information to Nigeria in the event of an attack and pursuit. The diplomatic channel will look endless as issues of National security will come into play. However, this would not seem the case if an agency like WAMSA exists due to its nature as a coordinating center which is staffed by nationals of all the States.

In addition, the issue of language barrier will be broken as the region consists of three major official languages: English, French and Portuguese as staff of the agency would be drawn from States in the region. Standardization has over the years been an area of great interest to the IMO. As such, having such an agency will help ensure that countries that lack the technical know-how are brought up to speed in other to ensure best practices in the handling of pollution or potentially



5 www.icc.ccs.org

⁴ Chairman of the Administrative Board of EMSA in his address at www.emsa.europe.eu

⁶ Daily Newswatch Thursday, September 19, 2013

dangerous situations. A classic example of this was the recent collaboration between EMSA and the Italian authorities during one of the most daring salvage operations ever undertaken, the one of Costa Concordia(where the salvage operation was done by the active involvement of EMSA which has since the accident ensured strict compliance with European standards).

Therefore, while Countries like Nigeria and Ghana can afford each year to send large numbers of its citizens to reputable institutions like World Maritime University, some can only at best send one person at a time. WAMSA could therefore coordinate training cooperation among States while also ensuring that a basic minimum standard is maintained in specialized areas by member States. This much was stressed by Jurgen Ehle, Rear Admiral (2013) who says, "the EU's efforts would focus on helping to improve coordination between regional navies, training and other measures". Again there is emphasis on training⁷.

It is pertinently obvious that from the words of quoted stakeholders, collaboration and cooperation have been consistently mentioned as key factors to driving safety and security in the region. And since the world is leaning towards efficiency (which is less cost and time in undertaking a particular task), it becomes trite that the synergy being canvassed should be harnessed under a single pool, WAMSA.

Going forward, and as we have witnessed with the successes so far recorded from organizations like ECOWAS, ECOWAS COURT and ECOWAS PARLIAMENT, the risks that our new wealth comes with in the discoveries of new oil blocks and the increase in shipping activities that are likely going to occur, equally comes a potential price that proactive measures are needed to ensure that if and when it happens, we would be ready. WAMSA therefore, is an idea which time maybe on the horizon.

⁷ Reported in the Dailynewswatch newspaper, Thursday September 5, 2013 on efforts by the European Union to assist Nigeria and countries around the region enhance maritime security

GARBAGE MANAGEMENT IN CAMEROON A POTENTIAL CONTRIBUTOR TO A GARBAGE PATCH IN THE ATLANTIC OCEAN (Talking Paper)

Jenette Tifuh MUJINGNI CHO, Cameroon

Presentation Outline

- Good morning Ladies and Gentlemen and welcome to this august meeting in the African region particularly in Ghana.
- My presentation topic has been carefully chosen because garbage pollution, especially plastics, is an issue of international concern in the maritime industry, for reason we shall know as we proceed.

 MY name is CHO MUJINGNI JENETTE TIFUH, a Maritime Administration working with the Department of Maritime Affairs and Inland Waterways in the Ministry of Transport in Cameroon. I specialized in MSEA at WMU.

MY presentation is outlined as follows:

- (1) I'll introduce the issue of garbage (plastics) and indicate some of its effect on marine life
- (2) I'll give an overview of my country since I know some of you may not have been there before,
- (3) I'll talk about land-based garbage management in Cameroon, bow effective or ineffective it is.
- (4) Furthermore, I'll present the efforts that my government has put in place so far to manage plastics and prevent pollution.
- (5) I'll equally propose some solutions that in my own opinion will help prevent the pollution of our marine environment by plastics.
- (6) However, I hope that by the end of my presentation, I'll learn from the experiences in your countries on how plastic garbage is managed to prevent it from getting into the sea.

Introduction of the issues being caused by Garbage.

 In the maritime industry when we talk about pollution, our minds go directly to oil and chemicals. We hardly think about garbage 1st. but garbage can be as deadly to marine life as




Maritime Environment



oil or chemicals.

- The worst of it is plastics which can stay in the marine environment for a very long period.
- Fish and marine mammals mistake it for food, some pick it up and feed their young ones. Others get trapped in plastic items like fishing nets.
- "Plastics are a contaminant that goes beyond the visual", says Bill Henry of the Long Marine Laboratory, UCSC.

- These items are sometimes dumped on the beaches by holiday makers and tourists. Others are dumped in towns and cities and they eventually get into the sea through run-offs,
- Some are equally dumped by passing ships directly into the environment.
- Whatever the source may be, plastic in the marine environment is very dangerous. Plastic debris, of all sizes and shapes, is a transboundary pollution problem with a powerful vehicle, the ocean.

- Now there may doubts on why I have to talk and lay emphasis on land-based garbage management when we are talking about maritime issues here.
- This is because research carried out by GESAMP reported that land-based sources account for up to 80% of the world's marine pollution.
- My emphasis on plastics is also because 60 95% of this land-based pollutants is plastic debris.
- The other 20% of this debris is from dumping activities on the water, including vessels (from small power and sailboats to large transport ships carrying people and goods), offshore drilling rigs and platforms, and fishing piers.
- Most of the littered plastics on land end up in the sea. This is because most of these plastic waste items are highly buoyant, allowing them to travel in currents for thousands of miles, endangering marine ecosystems and wildlife along the way.

- Durable and slow to degrade, plastic materials that are used in the production of so many products, from containers for beverage bottles, packing straps and tarps, and synthetic nylon materials used in the manufacturing of fishing lines, all become debris with time.
- Plastics debris accumulates because it does not biodegrade as many other substances do; although it will photo degrade on exposure to sunlight.
- Studies have shown that plastic bottles are the most resistant of all marine pollutants.
- A simple definition of plastics could be: any of a group of synthetic or natural organic materials that may be shaped when soft and then hardened, including many types of resins, resinoids, polymers, cellulose derivatives, casein materials, and proteins: used in place of other materials, as glass, wood, and metals, in construction and decoration, for making many articles, as coatings, and, drawn into filaments, for weaving.
- In chemistry, plastics are large molecules, called polymers, composed of repeated segments,

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called monomers, with carbon backbones. A polymer is simply a very large molecule made up of many smaller units joined together, generally end to end, to create a long chain. The smallest building block of a polymer is called a monomer. Polymers are divided into two distinct groups: thermoplastics (moldable) and thermosets (not moldable).

- The word "plastics" generally applies to the synthetic products of chemistry.

Material	Time to degrade
Paper bus ticket	2-4 weeks
Cotton cloth	1-5 months
Rope	3-14 months
Woollen cloth	1 year
Painted wood	13 years
Tin can	100 years
Aluminium can	200-500 years
Plastic bottle	450 years

Time Taken for objects to dissolve at sea

Source: http://www.imo.org/ourwork/environment/pollutionprevention/garbage/Pages/ Default.aspx as quoted from Hellenic Marine Environment Protection Association (HELMEPA)

- Plastic is generally a durable material. Its durability has made the culprit of the problem since it is considered resistant to natural biodegradation processes, i.e. the microbes that break down other substances do not recognize plastic as food. Yet plastic can be fragmented with the effects of UV, being broken down by light in smaller and smaller debris over time.
- Biodegradation, the breaking down of organic substances by natural means, happens all the time in nature. All plant-based, animal-based, or natural mineral-based substances will over time biodegrade. In its natural state raw crude oil will biodegrade, but man-made petrochemical compounds made from oil, such as plastic, will not. Why not? Because plastic is a combination of elements extracted from crude oil then re-mixed up by men in white coats. Because these combinations are man-made they are unknown to nature. Consequently, it has been thought that there is no natural system to break them down.
- The enzymes and the microorganisms responsible for breaking down organic materials that occur naturally such as plants, dead animals, rocks and minerals, don't recognize them. This means that plastic products are said to be indestructible, in a biodegradable sense at least.
- That is why a plastic bottle can stay in the marine environment for 450 ? 1000 years. This apparently has great effect on the ecosystem.



Maritime Environment

- Of the 260 million tons of plastic the world produces each year, about 10% ends up in the Ocean, according to a Greenpeace report (Plastic Debris in the World's Oceans, 2006).
- 70% of the mass eventually sinks, damaging life on the seabed. The rest floats in open seas, often ending up in gyres, circular motion of currents, forming conglomerations of swirling plastic trash called garbage patches, or ultimately ending up washed ashore on someone's beach.

- There has been a number of garbage patches in the world but the most popular was the North Pacific garbage patch which raised a lot of dust worldwide and affected a lot of marine animals.
- It was as large as the size of Texas in the USA and affected huge colonies of the Tern albatross, island albatross and the Guatalupe island.
- This is of course what we will not want to happen in the Atlantic Ocean.

- The result is huge fields of plastics in the ocean where no marine mammals can comfortably thrive.



National Efforts in the Republic of Cameroon

- She got her name in 1472 when a Portuguese navigator, Fernando Po, arrived the river Wouri estuary and named it "Rio dos Cameroes" (river of prawns) because of the abundance of giant shrimps that were found in the river.
- She is bordered in the North by Chad, Central African Republic in the East, Congo to the South-East, Gabon and Equatorial Guinea to the South, Nigeria to the West and the Atlantic Ocean (Gulf of Guinea) to the South-West.



- She has a surface area of more than 400,000Km2 with a land: water ratio of 99:1.





- Cameroon has a population of more than 20 million inhabitants.
- My town of interest (focus) for the purpose of this presentation is Douala, found in the Littoral region.
- This is the largest touristic and industrial city in Cameroon.
- It is the economic capital of Cameroon and host to Cameroon's major port and the river Wouriestuary. Its strategic site requires good garbage management because there are several creeks that empty into the main river leading to the Atlantic Ocean. Hence it can be the main potential route of garbage entering the Atlantic Ocean.

 In Cameroon plastics come from primary source such as brewery companies which produce soft drinks, mineral water companies, companies producing plastic bags as well as fishing nets produced by local fishermen.

- These items are bought and consume or used in occasions such as meetings, celebrations, picnics, plastic bags, fishing nets for fishing.

- Plastic bottles are equally used to sell various commodities in the market such as palm oil or vegetable oil.
- This is because these bottles have a standard unit of measurement hence they can be easily used.
- At home they are used to preserve water in the refrigerator.
- Some locally made drinks and yogurt for selling are also stored in these plastic bottles.

- No matters the source whether primary or secondary these items are consumed by every household and they finally end up in garbage bins. Some even end up in gutters near the road or are abandoned on the beaches during picnics.
- The Cameroon government has taken some measures to manage garbage on land to prevent pollution. We are going to examine each of these measures and see if they are sufficient.
- NATIONAL EFFORTS 1. Ratification of MARPOL 73/78 Annex V SCRI BOCAM GDCS NETOYCAM TOULA
- Cameroon has ratified MARPOL 73/78 Annex and has the obligation to install reception facilities for garbage at the port. However, at the Autonomous port of Doula, which is Cameroon's main and largest port, no reception facility for garbage is available.



Maritime Environment



- The government has therefore authorized some Garbage Disposal Companies (GDCs) to receive garbage from ships that berth at the ports.
- What I'm not sure of is whether there is a follow up by the government to know where this garbage collected are disposed of.
- The government has equally signed a contract with a land-based GDC called HYSACAM which is in charge of collecting garbage in all the regions of Cameroon. It does door to door collection in quarters like what you see in this picture with the use of garbage vans.
- HYSACAM equally has garbage bins placed at strategic places in the cities where garbage is disposed of.



- The issue with is company is that it has only few garbage vans, bins and workers; as such, the bins are not emptied regularly. This leads to over flow of garbage around bins. This situation is very common and is dangerous during the rainy season because the city of Douala suffers a lot of floods due to blockage or lack of drainage systems.
- Therefore when it rains and floods, all the dumped garbage are carried to the sea through runoffs.

- There is equally lack of garbage cans in some areas of the town. In such cases users of plastics of different types dump them in gutters near the road side. This is very dangerous for the marine environment because when it rains this plastic debris is carried to nearby rivers or streams and subsequence into the sea.

- One of the brewery companies in Cameroon known as "les Brasseriesdu Cameroon " which produces soft drinks and is a major distributor of the mineral water called Tangui has initiated a program nicknamed "ThePlastic Recup program".
- The aim is to collect used plastic bottles and recycle.
 Under this program plastic collection bins have been placed at strategic sites in major cities and towns.
 This is a fantastic idea.



- However, the problem here is that there has been very little sensitization on the use of these bins. Many people who see the bins don't really know its purpose.
- Also, the bins are very limited in their numbers. In a whole town, only one or two bins may be found.



Are these efforts enough?

- So far and to the best of my knowledge, these are the measures taken by the government of Cameroon to manage garbage on land.
- The question here is whether these efforts are enough.
- I don't think so.

(Proposed Solution)

- My own opinion on what could be done are follows:
- 1) There should be maximum sensitization on the security of the effect of plastics on the marine environment which should be first of all the level of
 - a) Schools: To educate on the culture of environmental stew and ship it should begin at the level of nursery and primary schools. The effect of plastics especially should be the point of emphasis.
 - b) Documentaries and round table discussions on this topic could also be organized on TV and radio regularly; TV and radio channels that enjoy wide public viewing should be chosen for such programs.
 - c) Celebrations like the World Maritime Day celebration which brings together stake holders in the maritime industry as well as a huge population and users of the sea should be used to sensitize them asses.
- 2) Sometimes it is always important to bring back home some of the good things we learn when we travel abroad. In Sweden and Denmark, I saw garbage bin in buses. That is a good culture to copy because buses are vectors of these plastics which are used during voyages.
- In Cameroon passengers in buses use a lot of mineral water and soft drinks. These containers are either thrown throw the bus windows or dumped in the buses.
- Secondly, I learnt about the installation of collection machines for plastics in shops and supermarkets. Plastic bottles are put in the machine and in return, you receive some coins. This idea is awesome. I was a beneficiary to this so I know what it means.
- That is why the Plastic Recup program by "les Brasseries du Cameroun" may not succeed because people don't have any direct benefit for depositing the plastic bottles in the collection bins.
- 3) The government of Cameroon should also authorize more GDCs on land to add to HYSACAM and ensure regular or daily collection of garbage. This will not only increase job opportunities for youths in the country, but will also prevent overflow of garbage out of the bins which may subsequently get into the sea through run-offs.
- MARPOL 73/78 Annex V should be implemented to the later. Reception facilities for garbage should be installed at the ports. This may encourage the GDCs presently collecting garbage at the ports to divert and operate GDCs on land instead.

3R Principle

- The population of Cameroon should be educated on the 3Rs principle.
 - a) **Reduce**: the government should encourage brewery companies and other companies who produce items in plastic containers to carry out research and make use of other types of containers that can easily biodegrade.

- Plastic packaging bags could also be substituted for paper bags or other degradable material.
- b) **Reuse**: these containers should be reused for other purposes as many times as possible before properly disposing of them.
- c) **Recycle**: the government should encourage its citizens to invest in recycling companies where these form of plastics could be converted to other types of material for use.

I now request for the opinion of my colleagues. I am sure the experiences in your countries will
add to my opinion and help my country properly handle plastics and prevent it from polluting
our seas and equally avoid a garbage patch in the Atlantic Ocean in centuries to come.

- On this note, I will like to conclude that plastics which get into the sea are exposed to natural processes such as wind, currents and waves. Hence, no matter how big it is when it gets into the sea, it may be broken up to smaller particles that seem invisible and are eaten up by fish, which subsequently end up on our tables.
- Dumped plastics might become invisible but it never disappears.

- Therefore, if you want to continue enjoying clean seas, manage garbage properly on land.

- Thank you for your attention.

Environmental impact of maritime activities in Nigeria : Measures and Challenges

Jack Okon SHOWELL, Nigeria

Abstract

Maritime activities have contributed immensely to the Nigerian economy. They have helped in the diversification of the economy and created jobs for Nigerians. However, there is need to practice sustainable and environmental friendly shipping. The Nigerian Maritime Administration and Safety Agency (NIMASA) is the outfit charged with the responsibility of monitoring and preventing pollution of the Nigerian marine environment by maritime activities. Incidents of marine environment pollution have escalated in recent times and range from oil spills from oil companies to piracy on waters. NIMASA has introduced regulations to tackle the problems. It has also put in place other measures to protect the Nigerian marine environment. Challenges faced by the agency have been outlined in this paper and recommendations proffered.

Keywords : NIMASA, Maritime activities, marine environment pollution.

1. Introduction

It is well known that shipping is one of the most important drivers of the economy in any nation. Shipping makes up approximately ninety per cent of world trade by volume as maritime transport vis-a-vis other means of transportation has enormous capacity and cheap cost. This is why maritime transportation can improve the economy of a country and create employment and construct cities (Ward-Geiger et. al; 2005). Projects such as building of ports, docks and establishment of marine companies provide jobs and create cities where the projects are executed (Watson, 2004). Maritime transportation has been long ago acknowledged as one of the strong catalysts for socio-economic development. Shipping has been at the fore front of linking the world in the process of globalization. Shipping connects countries, markets, business and people, enabling them to operate on a level hitherto impossible.

In Nigeria, the maritime industry has helped to stimulate import and export trade by making available surface transport through which goods are moved by sea on an enormous scale. Shipping trade accounts for example 95 per cent of the vehicular mean of Nigeria's international trade. Olokoba (2006) observed that maritime business has aided the diversification of the Nigerian economy and has continued to create job opportunities to Nigerians as mariners, crew staff, dock workers and various practitioners such as freight forwarders. The much needed foreign exchanged for the economy is also generated by maritime transport. Activities like ship repairs, taxes and port fees generate hard currency for the economy.

One could go on and on listing the importance of shipping and maritime transport to the Nigerian economy. There is however problems and issues arising from shipping activities and maritime transport which are harmful to the marine environment and these are discussed in this paper.



2. Environmental Problems arising from maritime activities in Nigeria

Negative environmental impact of maritime activities in Nigeria include uncontrolled illegal activities of both foreign and local vessels, oil spills from oil companies, poor management of solid and liquid waste by waste disposal companies, ballast water pollution of the aquatic environment, ship scrapping impact and high incidence of piracy on waters among others (NIMASA, 2012).

The problems have not however gone unnoticed by the authorities. The Chairman of a sea and cargo logistics company had lately complained that many foreign ships on the country's territorial waters are engaged in illegal activities polluting the nation's territorial waters with waste from ships and contribute greatly to fish stock depletion. A Bonga oil facility managed by Shell, the Anglo-Dutch oil company had in 2011 released over 40,000 barrels of oil into the marine environment. This massive oil spill had affected aquatic life killing many of them. Birds and vegetation were affected and also the livelihood of the people in the community was affected. Before the Bonga oil spill was the Mobil spill which devastated the Nigerian territorial waters in 1998. The Bonga oil spill affected the marine environment of the southern states and there was a long drawn legal battle between Shell Petroleum Development Limited and the Nigerian Maritime Administration and Safety Agency (NIMASA).

There is also the problem of ship-generated waste. Basically, ship-generated wastes are wastes generated during the normal operational life of a ship (Nathaniel, 2013). Wastes originating from ships include oily mixture of wastes such as slops and bilge, commonly called sludge. Garbage made up of solid wastes comprising food, floating dunnage, combustible and noncombustible materials, incinerator ash also constitute a problem. Others include noxious liquid substances and stack emissions from combustion of marine fuels and incinerators of ocean-going vessels. A baseline study on ship-generated waste carried out at Lagos Port complex and Tin Can Island Port Complex, both in Apapa revealed that the visits of vessels that had garbage /sludge onboard for evacuation in a month per port showed inefficient management in ship-garbage. The daily high volume of garbage in these Ports calls for urgent measures to be put in place especially now that these Ports have had improved ship's turnaround time with increased cargo throughput of over 60 million metric tons. It has been observed that more than 85% of these wastes are from foreign vessels with the situation getting worse in its impact to the maritime environment with attendant higher biological oxygen demand which endangers aquatic lives.

Ballast water discharge by ships can have deleterious effect on the marine environment. Bulk cargo carriers, cruise ships and large tankers use large amount of ballast water which is often taken on in the coastal waters in one region after ships discharge wastewater or unload cargo. This water is then discharged at the next port of call wherever more cargo is loaded. Ballast water discharge typically contains a variety of biological materials including plants, animals, viruses and bacteria. Often included in these materials are non-native, exotic species that can engender extensive ecological and economic damage to aquatic ecosystems.

Ballast water discharged into coastal waters together with other sources of marine pollution can be toxic to marine plants, animals, and microorganisms causing alterations such as growth changes, disruption of hormone cycles, birth defects, suppression of the immune system, and disorders resulting in cancer, tumors, and genetic abnormalities or even death (Huettel, 2004). Sources of seafood can become contaminated and unhealthy for consumption. Cholera outbreaks

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have been attributed to ship operations. It has been reported that the bacterium responsible for cholera outbreaks, Vibrio cholera can spread through attachment to marine organisms in ship ballast water. When the ship discharges ballast water, shellfish and drinking water can be contaminated.

Scrapping of ships also pose a threat to the Nigerian marine environment. Ships especially older ones can harbor numerous banned and dangerous substances. Typical examples are asbestos and polychlorinated biphenyls (PCBs). Asbestos was plentifully utilized in ship construction before its use was finally prohibited in most developed countries in the nineteen eighties. In developing countries where ship scrapping is undertaken workers are sometimes either not given protective equipment or the equipments are inadequate. The workers are exposed to dangerous vapors and fumes from burning materials and frequently work in dusty asbestos-laden areas. Environmental laws in ship scrapping yards in developing countries including Nigeria are relaxed or completely non-existent. Large volumes of very toxic substances escape into the marine environment leading to serious health problems among ship scrappers, the local population and wildlife.

3. Measures to combat threats from maritime activities to the Nigerian marine environment. 3.1 Introduction of Regulations:

In a bid to monitor the marine environment effectively, the Nigerian Maritime Administration and Safety Agency (NIMASA) introduced 12 regulations for the control of marine pollution in the country. Covered by these regulations is sewage, garbage dumps, ship registration, dangerous/obnoxious waste, anti-fouling system, ballast water management, liability and compensation, sea petroleum levy among others. Nigeria's ratification and domestication of some international conventions such as the international convention for the prevention of pollution from ships (MARPOL 73/78) has made the introduction of these regulations possible.

Some of the regulations will sensitize port users on what to expect. For example, the antifouling system regulation stipulates that "Persons in charge of shipyards or ship repair facilities are expected to ensure that any waste from the application or removal of any anti-fouling system specified in the first schedule of the regulation is collected, handled, treated and disposed of in a safe and environmentally sound manner to protect human health and the environment"

Concerning Ballast water management, "A ship constructed before 2009 with Ballast water capacity of between 1500 and 5000 cubic meters, inclusive, shall until 2014, perform Ballast water exchange with an efficiency of at least 95 per cent volumetric exchange of Ballast water, provided that for ships exchanging Ballast water by pumping through method, pumping through three times the volume of each Ballast water tank shall be considered to meet the standard described in this sub-regulation and pumping through less than three times the volume may be accepted where the ship can demonstrate that at least 95 percent volumetric exchange is met".

For dangerous or noxious liquid substances in bulk regulation, "every ship carrying noxious liquid substances shall be provided with the procedures and arrangement manual which is in compliance with standards such a manual shall be approved, in the case of a Nigerian ship, by the agency, or in the case of a ship registered in a state party to the MARPOL convention by or on behalf of the government of that state". Summarizing the activities of NIMASA last year, the director general had said that the agency had developed 12 regulations on marine

environment pollutions especially those from ships. He said the regulations had been put in place by the Federal Ministry of Justice. The director general also said the agency had started strict enforcement of the use of port waste reception facilities which has significantly reduced incidences of pollution from garbage.

3.2 Guidelines for Reporting Incidents:

The agency has set guidelines for reporting of pollution incidents and actions to be taken in the event of a spill and is also working on a plan to train, equip and deploy some Nigerian youths as marine safety and environment protection marshals to patrol the nation's waters and respond to incidents. This is in line with global best practices on the polluter pays principle. Partnerships with some agencies and stakeholders have been formed by NIMASA to tackle the problem of marine environment pollution. The agency has collaborated with the Nigerian Liquefied Natural Gas (NLNG) and the Nigerian Port Authority (NPA) on the installation of offshore reception facilities at NLNG terminals. It has also partnered with NIMET to establish an observatory along the Nigerian coastline and there is also collaboration with NOSDRA to create awareness on environment pollution.

3.3 Implementation of International Instruments:

The Marine Environment Management (MEM) department of NIMASA has been empowered in a bid to make sure that the agency's measures at attaining clean oceans are sustained. The department has been mandated to implement all relevant international instruments relating to the protection and preservation of the Nigerian marine environment and its resources in line with international best practices. Accordingly, the MEM department has recorded some achievements. It is monitoring the usage of port reception facilities. As a result, vessels berthing at the ports now make proper use of the facilities as they are now aware that the waste can be quickly evacuated.

3.4 Monitoring of ship scraping operations:

The monitoring and supervision of the scrapping and evacuation of ships in the nation is done by the MEM department. It monitored and supervised the scrapping and evacuation of five identified wrecks within the Lagos Coastal Waters to ensure that there was no pollution of the environment. The hull was totally removed from the water. This was in compliance with the Nairobi International Convention on the removal of wrecks (2007), and the Hong Kong International Convention for the safety and environmentally sound recycling of ships, (2009).

3.5 Boat Patrol/Monitoring Exercise of the Waterways:

Patrol boats have been delivered to the agency which has enabled the MEM department to carry out regular boat patrol and monitoring exercise of the waterways under a joint operation /enforcement team from the operation and shipping development department. This is in compliance with provisions of the relevant IMO and international Labor organization (ILO) conventions and also cabotage Act.

3.6 Facilitation:

The approval by the IMO of a technical support/funding for the development Economic Assessment of Ballast Water management has been facilitated by the MEM department. The IMO had awarded the project to a consultant to start the research work.

3.7 Inspection of Vessels:

Concerning port state control, more than 256 vessels have undergone inspection by officers at the zones in Lagos, Port Harcourt, Warri, Calabar and Onne to ascertain the level of compliance by ships calling at the ports as stated by the Merchant Shipping Act (MSA) and NIMASA Act, 2007.

3.8 Establishment of Marine Pollution Laboratory:

The Marine Environment Management (MEM) department of NIMASA monitored the construction of the marine pollution laboratory and compiled the necessary equipment for the laboratory. MEM is also planning to set up functioning marine laboratories at the zonal offices. It is also going to inspect tank farms and shipyards to ensure compliance with relevant IMO Conventions. MEM is in the process of developing a marine biological baseline data and prepares a status assessment ballast water management plan.

3.9 Boat Patrol:

Effective boat patrol and monitoring of the terminal waters to track offenders and enforce the polluter pays principle is also under the purview of the MEM department.

3.10 Equipment Stockpile:

Stockpiling of all required pollution response equipment and machineries including pollution control boats, helicopters, booms, skimmers, personnel protection kits, etc has been put place by NIMASA under the responsibility of the MEM department.

3.11 Inspiration of Stakeholders:

NIMASA's effort at preventing pollution of the Nigerian marine environment has inspired some positive responses from stakeholders who are now willing to invest and comply with the regulations. African Circle Pollution Management Limited (ACPML) is one of such stakeholders which now have facilities such as plastic water granulator which is used to cut plastic waste into pellets, solid waste incinerator, used to burn solid waste after sorting, Drum beater used to crush used drums, oily water treatment plant, used to process all types of oily waste and crane used for collection of solid wastes from ships.

4. Challenges

The Nigerian Maritime Administration and Safety Agency (NIMASA) which is saddled with the responsibility of ensuring environmentally friendly maritime activities is however faced with some challenges which include

• Inadequate monitoring and response equipment for the effective discharge of duties

such as patrol boats for monitoring of territorial waters to ensure compliance and quick response to pollution alerts and also helicopter for aerial surveillance.

- Challenge of instituting attitudinal changes in the Niger-Delta areas through sensitization programs to prevent pollution as a result of vandalized pipelines
- Lack of basic mandatory training for the officers of the Marine Environment Management (MEM) department of the agency for effective discharge of their tasks.
- Inadequate operational vehicles for the department and the zonal offices to ensure effective implementation of statutory functions.

5. Conclusion

The importance of maritime trade and activities in the economy of a country cannot be over-emphasized. Nigeria has benefitted immensely from its maritime sector. However, there is the need to monitor and protect the marine environment in order to ensure sustainable and environmentally friendly shipping and other forms of maritime activities. The Nigerian Maritime Administration and Safety Agency (NIMASA) must be empowered, well equipped and funded to do this. NIMASA must ensure that all Nigerian seaports comply with the provisions of MARPOL 73/78 and practice the United Nations Environment Program's concept of Green Economy for improved human well being and social equity and also reduce significantly, environmental damage and threat to the ecology of the Nigerian marine environment. NIMASA should collaborate with other maritime agencies in the nation such as the Nigerian Ports Authority (NPA), Shippers' Council, Nigerdock to improve the industry in Nigeria.

References:

Ward-Geiger, L. L., Silber, G. K., Baumstark, R. D., & Pulfer, T. L. (2005). Characterization of Ship Traffic in Right Whale Critical Habitat. Taylor & Francis Inc., doi: 10, 1080/08920750590951965. ISSN 0892-0753.

Watson, T. (2004). Ship pollution clouds USA's skies. USA Today. Retrieved November 1, 2006 from http://www.usatoday.com/news/nation/2004-08-30-ship-pollution_x.htm

Huettel, S. (2004). "Liner may have dumped oily water, reports say". St. Petersburg Times http/ www.sptimes.com/2004/04/11/Business/Liner may have_ dumped.shtml.

Nathaniel. V. O. (2013). Environmental Impact of Ship-Generated Waste At Nigerian Seaports. The Nigerian Tycoon, Vol.3, No. 15.

NIMASA (2012). Managing Marine Environment Pollution in Nigeria The Nigerian Tycoon. Vol. 6 issue 1.

Olokoba, S. O. (2006). Maritime Business. Lazokoroji.wordpress.com/page 121



KENYA FERRY SERVICES LIMITED

Musa Hassan Musa, Kenya

Background: Kenya Ferry Services Limited is a state corporation registered in 1989 under Companies Act Cap 486 Laws of Kenya .

Vision: A Ferry service of choice .

Mission: To efficiently operate a safe, reliable and sustainable ferry services that is customer driven and meets the expectations of stakeholder.

Core Values: Team work, Integrity Equity, Customer focus, Sensitivity to the environment

Strategic objective:

- Mobilize and develop resources to achieve a sustained competitive advantage.
- To operate and manage a sustainable viable ferry service that is safe and reliable within the set operating schedules in line with the changing demands.
- · Enhance and sustain good corporate image of the company.
- To institute and implement sustainable corporate governance programs that will instill integrity, promote responsibility, accountability and a positive business culture.
- To ensure enactment of an enabling legal framework supportive of the Company's business objectives and growth.

Mandate:

The core mandate of the company as per its Memorandum and Articles of Association is inter alia to acquire, maintain, operate and manage ferries, boats and other vessels for transporting of passengers, petroleum products and other cargoes ; and to sell, lease exchange, transfer and dispose of such ferries or vessels as may be deemed profitable to the company, to meet present and future needs of its customers.

Current company activities:

- Currently the company's main activity is the provision of a ferry link to both pedestrians and vehicle traffic. Our main areas of operation are Likoni and Mtongwe.
- Pedestrians constitute about 70% of the total business volume whereas vehicles account for 30%. Vehicles pay government approved toll charges, while pedestrians cross free of charge.

Current operation levels:

The ferries serve an average of 300,000 pedestrians and 5,500 vehicles daily. The company is 80% owned by the Government of Kenya and 20% by Kenya Ports Authority.



Operating schedules

Departures from either end	
0400 Hrs – 500Hrs	(30 minutes frequency)
0500 Hrs – 0600 Hrs	(15 minutes frequency)
0600 Hrs – 1000 Hrs	(10 minutes frequency)
1000 Hrs – 1700Hrs	(15 minutes frequency)
1700 Hrs – 2000 Hrs	(10 minutes frequency)
2000 Hrs – 0200 Hrs	(30 minutes frequency)
0200 Hrs – 0400 Hrs	(60 minutes frequency)

FLEET/FERRIES

Currently the company operates seven ferries namely :

	Vehicles	pedestrians
MV. Likoni	60	1550
MV. Kwale	60	1550
MV. Nyayo	60	1200
MV. Kilindini	40	1440
MV. Harambee	40	1440
MV. Pwani	40	1200
MV. Mvita	-	900

FERRY DEMAND ANALYSIS AND FORECASTING

Pedestrian demand analysis and forecasting:

<u>Year</u>	<u>passenger</u>	<u>trend%</u>
2011/2012	118,300,572	30
2012/2013	141,960,686	20
2013/2014	163,254,789	15
2014/2015	187,743,008	15



Demand for ferry services by vehicles

Year	<u>vehicles</u>	trend%
2011/2012	2,021,785	5
2012/2013	2,121,983	5
2013/2014	2,228,083	5
2014/2015	2,339,482	5

ACHIEVEMENTS

Modernizing of fleet / ferries

- The company has embraced the modern technology by modernizing its fleet of ferries by acquiring 2 new and faster ferries in 2009 so as to deliver quality service- "M.V. Kwale" and "M.V. Likoni".
- The three aged ferries "M.V. Nyayo", "M.V. Kilindini" and "M.V. Harambee" have been upgraded following the installation of new engines C-12 engines.
- The company is committed to operating safe ferries which conform to the IMO standard regulations and requirements. To realise this, our vessels are subjected to annual dry docking maintenance schedules. Currently all ferries have undergone dry docking except for "M.V. Kwale and "M.V. Pwani".

Safety and security

- Kenya Ferry Services as a company handling human traffic has invested capital resources to ensure that the ferry users are safe and secure both at the waiting bays and on board the ferries.
- To realize this, the company has installed (14) Modern Safety and security screening turnstiles located at Island and Mainland waiting bays.
- We continue as a company providing security to our ferry users by installing 24hr surveillance cameras and working closely with the police and other government security agencies in line with International Ship Port Security (ISPS).
- The company has invested in the provision of safety gadgets including life jackets, life buoys, life rafts and life rings.
- Fire fighting equipment:- cylinders, fixed sprinklers system.
- Traffic segregation and enhancing safety promotions through daily safety announcements.

MAJOR PROJECTS

It is worth noting that the company is undergoing continuous transformation to improve on

Transport & Logistics



service delivery.

The following projects have been initiated and work is in progress :

- Expansion of ramps both Island and Mainland
- Rehabilitation of maintenance jetty.
- Rehabilitation of Mtongwe pontoons and pedestrians jetty
- Acquisition and installation of weighbridge to boost revenue collection.
- · Development of the Island/Mainland ramp
- The company has awarded a transaction advisory services for the development of Island infrastructure though Private Public Partnership (PPP).
- The company has initiated a feasibility study for establishment of the Mombasa wider ferry services and Lake Victoria.

You will appreciate that the above projects are underpinned to support South Coast Resort City which is a flagship project of Vision 2030.

CHALLENGES

Finally, I would like to mention that as a company we have had our share of challenges which we continue addressing several mitigation.

- Inadequate funding.
- Increasing human traffic.
- Inadequate infrastructure (alternative land for expansion).

Maintenance

All the maintenance for the ferries and its assets are pre-programmed, and handled by the engineering department. This department consists of three sections i.e.

Mechanical, Electrical, and General Maintenance. The maintenance programmes are divided into the following four categories:

- Routine Maintenance: This involves the servicing of one ferry on a daily basis. This program is intended to ensure that each ferry is serviced at least once every week
- Planned Maintenance: This is done as per the manufacturer's schedules.
- Lloyds Class Requirements: The ferries are registered under Lloyds class and fall under the following class service schedules.
- Annual Survey: In this survey, ferries are inspected by a class surveyor once a year, checking for mechanical & safety conditions of the vessels.
- **Docking survey**: The class certified ferries undergo docking survey every two and a half years, where the structural conditions, cathodic protection against sea barnacle growth, and general operating equipment is done. This survey is done at the African Marine dry dockyard.
- **Special Surveys**: This is done once every 5 years. This inspection covers a complete overhauling of all operating equipment i.e. the main engines, propellers, general service pumps, safety equipment, communication equipment, generators and e.t.c.
- Intermediate Surveys: This inspection is done by the class surveyors at a time determined by the surveyors.

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DEVELOPMENT OFINLAND WATER TRANSPORT IN MALAWI (Talking Paper)

Joseph Sheketeni BANDA, Malawi

First, allow me to thank the conveners for giving me this opportunity to make this presentation about Maritime Affairs of Malawi. But before I do so let me introduce myself. I am Joseph S. Banda from Malawi, the newly and only Sasakawa Fellow in Malawi.

As I said the presentation is about Water Transport in Malawi.

First allow me to give you the outline of the presentation;

- I will first introduce to you the geographical location of Malawi, facts about Malawi and we will also look at Lake Malawi, which is the centre of my presentation.
- We will also look at the background of water transportation in Malawi, how and when moving cargo/passengers on water began
- On shipping services I will talk about ship operation and the types of ships that are used to move cargo from one point to another.
- We will move on to look at Malawi Lake Ports and also how the ports are operated.
- Furthermore I will talk about the Malawi Maritime Administration as the water transport subsector in Malawi.
- Before I conclude I will share with you what we are doing, Malawi as a nation, to improve inland water transport in the country by looking into the future.

FACTS ABOUT MALAWI

Malawi is a landlocked Country in the Southern Eastern Africa, and is boarded by Tanzania to the northeast, Mozambique to the east and Zambia to the west. It is occupying 118,480 sqkm of land with a population of about 14 million people. Its capital city is Lilongwe, which is also the center of political governance. The economy is Agro based; heavily dependent on agriculture, where tobacco is the main cash crop. Other crops are coffee, sugar, with maize (corn) as the main food crop. Recently we have



seen ourselves diversifying into other areas of wealth creation for the country; that is mining and tourism. On mining we are currently doing on Uranium, but there are prospects for oil and gas under Lake Malawi seabed.

LAKE MALAWI

The northern part of the Country is largely boarded by Lake Malawi which is 570Km long

and average width of 50Km, and occupies 28,800 sq Km of the country. (see Map next page)

Out of the 4transport corridors that give the country access to the outside world, Lake Malawi forms a link of the North Transport Corridor through Dar eslaam in Tanzania.

The lake has one main inlet river (songwe) which also forms a boundary between Malawi and Tanzania in the north. Shire River is the main outlet in the southern district. This river joins a bigger river (Zambezi River) in Mozambique, and finally drains into the Indian Ocean.



WATER TRANSPORTATION IN MALAWI

Water transportation in Malawi started in 1934, not very long ago if we are to compare with the outside world. However, our ancestors used to undertake either transportation or fishing on lake by using dugout canoes. In those olden days people on both side of the lake were trading with each other, and they were crossing the lake in order for trade to happen.

When the British came and saw the potential for waterborne trade they brought in motorized vessels and introduced regular services, to carry goods and people. Their main objective was to link up the Northern and Southern parts of the country. At that time the Southern part

Solution

was well covered with rail network and they could not do the same in the north because of the terrain. In the absence of all seasonal and tarma croads parallel to the lake going to the north, using the lake was unavoidable choice. And so the British saw this necessary to introduce regular shipping services, and the first company to do this, which was also a government company, was Malawi Lake Services a subsidiary of Malawi Railways.

There are 2 main ports on the lake namely Chilumba in the far north, Nkhatabay, Chipoka in the center and Monkey bay in the south. There are also other call points along the lake and also at Likoma and Chizumulu Islands. These are not so well developed but they are safe enough for passengers to board on and off.

SHIPPING SERVICES

As I said, ladies and gentlemen, the first company to venture into water transport came with the British, and it was the same company that was also operating the rail and so it was called Malawi Railways Ltd. This was a government company. Until few years ago, Malawi government decided to allow private interested investors to run the company on Public Private Partnership (PPP) arrangement. So the new company, Malawi Shipping Company, is privately owned and offers both freight and passenger services. Like I said, the lake forms part of the Northern Transport Corridor, there is a lot of cargo that comes in the country through Tanzania and Mozambique. For example, Coal, fertilizer, petroleum products, just to mention a few. Other cargos are agricultural produce locally produced in the country, these are; Tobacco, Coffee, Maize etc.

PORT SERVICES

When the first Company introduced the shipping services it was the same company that also had to locate suitable places along the lake where landing facilities were constructed. The four main ones are Chilumba, Nkhatabay, Chipoka and Monkeybay. These are the ones that were identifies as having naturally deep waters and well sheltered. Out of the four Chipoka port is the only port that has both road and rail connections. It is somehow a very busy port and it complements to Chilumba port in the north for being the only two ports that have container terminal facilities.

Let me say that, in the view of shipping services concession got out, the government continued operating the ports until five months ago, when government gave the operations to a private company on PPP arrangement. The new company now is called Malawi Ports Company. This will allow private investor to run the ports competitively and efficiently; reduce queues for berths, reduce ship's waiting time, all resulting in reduced port charges. The government remains with the role of a regulatory authority, regulations for the development and operation of lake ports in the country.

MARITIME ADMINISTRATION

All matters relating to water transport are taken care of by the Marine Department, which is a regulatory arm of the Ministry of Transport and Public Works on water transport sub sector. Malawi became a member of IMO in 1984 and since then the government of Malawi through the Marine Department has benefited much from the conventions and training offered by IMO. Malawi is also a member of Port Management Association of East and Southern Africa (PMAESA), a grouping of ports in the Southern Africa and Development Committee (SDAC) region, aiming at sharing information and experiences on port management and operations.

The mandate of the department is prescribed in the Inland Water Shipping Act and this provides a legal framework for the water transport subsector. The department therefore has the following core functions :

- 1. The first function is that of regulating the marine transport services. This function is further divided into two divisions: division that ensures safe operation of ships and the other one that ensures standards for port operation and management.
 - The safety division has the following functions ; registration of vessels, examination and certification of seafarers, ship surveys and Law enforcement.
- 2. The department has also the function of providing training for Malawi Seafarers. Malawi has a fully-fledged Maritime Training School where maritime education for officers and seamen is offered. However the school does not have programs to train workers and officers in the port sector, and often training in this field has been obtained from outside the country.
- 3. The last core function for the department is to deal with Malawi maritime environmental problems. These are common environmental problems facing Malawi lake ports and ship operation. Examples are; emission to air, oil pollution, discharges to water, noise, emission to soil, and waste production. The role of the department in this regard, therefore, is to ensure that the port and ship operators comply with maritime environmental policy which refers to issues such as sustainable development and society integration.

CHALLENGES

Water transportation in Malawi faces a lot of challenges that are Maritime related: general water transport sub sector development. Listed below are some of the challenges identified in this regard.

- The provisions of the inland Waters Shipping Act were established prior to the concession of the lake shipping and port services. The Act does not have a facilitative environment for the operation of shipping and port services concessions.
- In light of the privatizing the water transport operations and infrastructure development on PPP arrangements, government now finds that it has no adequate capacity to monitor and evaluate these concessions. This is a challenge at the moment, and this means that the government shall have to consider training people in this specialized area.
- The regulatory framework and the enabling legislation are lacking and outdated respectively.
- Chipoka port is the hub of integrated transport as is strategically located and being served with three modes of transport at the same time; road, rail and water. The only setback with this port is siltation. There is often times need to do maintenance dredging, and it is costly.

FUTURE PROSPECTS

Finally, the government through the Maritime Administration, in its quest to reduce cost of freight transport, is doing all it can to find better and cost effective corridors that could respond

to this aspiration. The Shire River that connects the Zambezi River in Mozambique itself drains into the Indian Ocean. The distance is only 250km. The government embarked on a study to see the possibility of using these two rivers to connect us to the Ocean. Since it is a regional project as other members in the SADC region are likely to benefit from it, African Development Bank (ADB) is funding the studies. As you can see below, already interested investor has built a 300 meter quay as part of a fully-fledged river port on the shire river.

The success of this project will mean that waterborne trade will be enhanced, making significant contribution to the economic growth of the country.



A 300 meter Quay wall on Shire River

CONCLUSION

In my conclusion I wish to end this presentation by saying that;

- Traditionally water transport in Malawi is restricted to domestic trade as access to the outside world is seemingly done in conjunction with other modes of transport (multimodal transport).
- The Maritime Administration is working out toward establishing national ports authority upon review of the Act now that appropriate regulations would have been in place.
- Upon successful implementation of shire Zambezi water way, Malawi as well as other member states in the SADC region stand to benefit from the reduced landing cost of all freight coming into the region from the outside world and this will ultimately trickle down to the consumers.



CABOTAGE Its implications and potentials

Catherine HAIZEL, Ghana

The development of cabotage is considered as one of the basic instruments for stimulating a country's economy.

Cabotage has the advantage of creating specialized employment and the acquisition of the know-how that is necessary for the development of maritime transport and through the whole Maritime transport logistics service provider industry. It therefore facilitates the development and growth of a modern domestic waterborne transportation system and infrastructure that could be used to support the nation's international trade

It encompasses more than a simple commercial operation of vessels. It is for this reason that many countries worldwide have defined policies of support to the existence and development of their national cabotage services because it also serves as an instrument vital for the stimulation of the economy, in foreign earning savings, creation of employment and in the consolidation of the activities that constitute the whole Maritime industry.

Currently, two types of cabotage regimes, strict, relaxed or liberalized are being applied by different countries. The adoption and application of either of these types are determined by national economic and shipping interests, the socio-political, and other local factors. In what is termed a "strict" maritime cabotage legal regime, the four elements of restrictions that is where domestic shipping trade is restricted to ships built, owned, crewed and operated solely by citizens (or flag ships) apply. The object of strict cabotage policy is to exclude foreign-built, owned, foreign crewed and operated vessels.

Cabotage laws on the other hand are said to be relaxed, or liberalized if any of the four elements are not strictly enforced and there is some level of foreign participation either in the ownership or building of the ships used and nationality of the operators involved, or foreignregistered ships' involvement, in a nation's coastal shipping is allowed. The United State of America, the "apostles for free trade" follows the strict cabotage regime.

Closer home, Nigeria is one country that has comprehensive cabotage legislation. Nigeria like the USA follows a strict cabotage regime. Section 3 to 6 of the Coastal and Inland Shipping (Cabotage) Act 2003 reserves the bulk of Nigeria's coastal trade i.e. the carriage of goods and passengers, where possible on vessels built, owned, registered in Nigeria and manned by qualified Nigerian seafarers. The four pillars of the Nigerian cabotage regime are therefore that:

- · Cabotage vessels must be wholly owned by Nigerian citizens;
- Cabotage vessels must be registered in Nigeria;
- · Cabotage vessels must be manned by Nigerian citizens; and
- Cabotage vessel must be built by Nigerian shipyards.

Malaysia on the other hand is a country that has relaxed cabotage policy. Malaysia's shipping policy allows foreign registered vessels to be licensed by the Domestic Shipping Licensing



Board (DSLB) to engage in the local cabotage trade where the Malaysian Shipping Association (MASA) confirms there is no available Malaysian registered vessel to do the job. Available data shows such temporary licensing of foreign vessels is most pronounced in the carriage of chemicals and oil.

Ghana Shipping Act

The cabotage regime in Ghana is provided for under section 1 of the Ghana Shipping Act dealing with restriction on trading in Ghanaian waters. The section reserves trade in Ghanaian waters for only Ghanaian registered vessels.

The Ghana Shipping Act was amended by Act 826 of 2011 following the exploration and production activities taking place offshore. This amendment extended the Ghanaian maritime jurisdiction to shipping activities within the 500 meters safety zone generated around offshore installations. The amendment further extended local trading activities from the shore to the offshore and reserved it for Ghanaians.

Act 826 (Section 1A inserted in Act 645) recognizes the fact that Ghana lacks capacity in terms of human and other logistical resources to perform some of the functions involved in the exploration of this oil therefore a permit regime has been created within the law to allow owners of foreign registered vessels to engage local trade provided certain conditions are met.

By inference it can be seen that Ghana's laws are relaxed (S2.7.1b & S2.7.2) since there is the leeway created for foreign participation.

There is however no concrete cabotage policy in existence, which details the rights and obligations of operators who might want to participate in the oil business in Ghana.

A Cabotage Regime can only function effectively in an efficient maritime regulatory framework that is favorable to its development. The type of regime adopted therefore needs to be fashioned so as to support the national maritime policy.

A national maritime policy must also necessarily form part of an overall national development plan and must have verifiable goals and objectives.

Taking cognizance of the current environment in the maritime sector, a prospective Ghanaian cabotage regime would therefore need to follow the relaxed regime in order to limit its scope of application, the objective being to encourage partnerships between foreign and domestic companies while building required capabilities through a well-structured and carefully monitored knowledge transfer system. Currently among the four elements of cabotage, order of availability of resources locally can be said to be manning, managing (operation), owning and building.

SEPARATE REGISTRY

A prospective cabotage regime for the country will therefore need to address three main issues. First, a separate registry of cabotage vessels will need to be set up. This will specify the types of vessels to be registered which will be, (a) wholly Ghanaian owned vessels (b) joint venture owned vessels (c) bareboat chartered vessels (d) foreign owned vessels and (e) temporary registered cabotage vessels.

To do this, a Registrar General's Department will need to be set up within the GMA to oversee the registration of both vessels and to maintain the records of registered cabotage vessels

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and seafarers, as done in most countries. The GMA will be responsible for ascertaining skill requirements and development of what is required for the industry. It will also be charged with monitoring of knowledge transfer and ensuring foreign companies adhere to any agreements made in connection with joint ventures.

Cabotage fund

The second issue is the setting up of a cabotage fund into which all levies will be paid. This will serve as a source of funding for developing local capacity in ship acquisition. The most important issue is the need for knowledge transfer. The cabotage regime should categorically incorporate provisions for foreign vessels permitted to register in the cabotage register to put in place training plans for locals or be encouraged to set up research facilities in our institutions.

Such encouragement of partnership creates a win-win situation for all the parties' involved, foreign operators, government and the local people of Ghana. A well-structured and carefully monitored knowledge transfer system ensures that the local people develop required growth in competence to compensate for resource depletion, the Government enhances its bargaining position in future endeavors through the development of competence and the knowledge base while the foreign operators develop a core of necessary local skills for continued future operations especially given that Ghana's oil and gas industry being new has got a long economic life.

Ghana should also exhibit the leadership qualities it has always shown by incorporating a measure of regional cabotage objectives into any prospective policy. This means that provisions should be made for resources of ECOWAS (The Economic Community of West African States) member states to be given special access and priority to the local trade. This will in the long run serve to promote regional co-operation under the ECOWAS objectives.

Conclusion

Ghana needs to face realities and recognize our shortcomings. A prospective policy should therefore be manageable with well spelt out monitor-able and verifiable objectives. While encouraging partnership between foreign and domestic companies, the Government must ensure that knowledge transfer is actually taking place by making things like research and training programs mandatory in all partnership agreements.

Exchange of information on Maritime Affairs - Madagascar

Jean Edmond RANDRIANANTENAINA, Madagascar

Madagascar is an island located in the Indian Ocean and situated four hundred kilometers from the east coast of Africa. As an island State, it is obvious that maritime affairs are of capital importance for the country. In the following presentation, three areas of the maritime affairs will be discussed namely the Madagascar maritime profile, the ocean governance, the maritime transport administration and the current maritime issues.

1. Madagascar maritime profile

Before addressing any subject in the maritime field, it is important to know the maritime profile of the country in order to better comprehend the issues that are currently going on. It is in this perspective that there is a need to discuss at first Madagascar maritime profile.

Madagascar is the fourth biggest island in the world. It is located in the Indian Ocean in the east of the African continent. The size of the country is around 587,041 square kilometers with a population of 22,585,517¹. It has 5,000 kilometers of coastline, 253 small islands, 111, 120 square kilometers of Territorial Sea, 1,140,000 square kilometers of EEZ (Estimation) and a Search and Rescue Region of 4 million square kilometers. From these different numerical data,

it can be drawn that the maritime areas under the jurisdiction of Madagascar are vast and the responsibility of the country in the maritime domain is immense.

Madagascar has various marine resources be it living resources or non-living resources. In terms of living resources, Madagascar has coral reefs (380 species), mollusks (525 species), coral fishes (750 species), pelagic fishes (such as tuna), sea turtles (5 species), seabirds, mangroves, shrimp, lobster, crab, dolphins,



and whales. As far as non-living resources are concerned, oil and gas are at the moment under exploration.

Based on its marine resources, the maritime activities in Madagascar are mainly founded on shipping, fishing, maritime tourism, and oil and gas exploration.

From the above mentioned information, there is no doubt that Madagascar has an incredible potential in the maritime field. Nevertheless, the country faces various threats such as maritime piracy and armed robbery against ships, rosewood and drug trafficking, illegal fishing, illegal immigration, oil pollution and tsunami threats.

¹ July 2011 etimation



2. Ocean governance

Considering the great potential of Madagascar in the maritime domain, it is interesting to have a look on its ocean governance. In Madagascar, ocean governance is based on international and national legal basis. Among the international instruments, we can cite the United Nations Convention on the Law of Sea (UNCLOS), the International Maritime Organization (IMO) conventions and instruments, and other pertinent maritime conventions such as those of the International Labor Convention and those related to the maritime commerce to which Madagascar is party to. These international conventions and instruments are incorporated in various national legislations and regulations from which are based the actual ocean governance organization. The major maritime national legal instruments are the maritime code, the fisheries laws and regulations, the environmental laws and regulations, and the mining code.

In terms of organization, the responsibilities in the maritime domain are allocated to seven ministries namely the Ministry of Defense (Maritime security), the Ministry of Transports (Maritime transports and safety), the Ministry of Environment (Marine environment protection), the Ministry of Higher Education and Scientific Research (Marine scientific research), the Ministry of fisheries and Halieutic Resources (Fisheries management), the Ministry of Land Settlement (Hydrographic survey and production of charts), the Ministry of Mines (Marine non-living resources management) and the Ministry of Foreign Affairs (Maritime international relations).





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3. Maritime transport administration:

Maritime transport has an important role to play in the economy of Madagascar. In this regard, Madagascar has seventeen ports among which six are opened to international trade. Annually, Madagascar ports altogether handle 5,325,264 tons of cargo where 3,987,337 tons are for the international trade whereas 1,337,927 tons concern the domestic trade. To ensure the transportation of these goods, Madagascar does not have ships operating internationally in a long distance shipping



route but has only very few ships flying its flag ensuring the liaison with the neighboring islands and the majority of its fleet operating domestically. From the 2012 statistics, Madagascar has 1,173 units which represent 41,801.57 GRT. These units are used in shipping activities (cargo and passenger transportation), fishing activities, and maritime tourism and leisure activities. In term of seafarers, Madagascar disposes 4,107 seafarers serving in shipping and fishing among which almost 55% work in international seafaring. From these facts and figures, it can be concluded that despite the great potential of Madagascar in the maritime domain, the maritime activities and the number of deployed means (assets and human resources) supporting them remain low.

The Ministry of Transports is the authority in charge of the maritime transports administration in Madagascar. To do so, it has one General Directorate and one Directorate at the ministry level and two autonomous public agencies. The Ministry of Transports, through its General Directorate of Maritime, Waterways and Air Transport and its Directorate of Maritime and Waterways Transport, is in charge of the maritime transport national policy formulation, the planning and the overall supervision of the activities. The Agence Portuaire, Maritime et Fluviale ? APMF (Port, Maritime and Waterways Agency), which is an autonomous agency under the Ministry of Transports, is in charge of implementing the national policy on maritime transport and acts as port authority as well as maritime authority. As a port authority, the APMF is responsible for regulating port activities and infrastructure. It plays also an important role in the economic development promotion of ports in Madagascar. As a maritime authority, the APMF is in charge of maritime safety administration and are greatly involved in ship safety regulation and supervision, in SAR, and in seafarer's training regulation and supervision. With regards to seafarer's training, Madagascar has one National Institute of Nautical Studies known as the "ENEM" (Ecole Nationale d'Enseignement Maritime) which trains seafarer for the merchant marine and the fishing domain.





Fig. 1 Maritime transport administration in Madagascar



4. Maritime issues

At present, there are several issues that need to be solved in Madagascar in the maritime domain to ensure an adequate development of this sector. These issues are related to the ocean governance as well as to the maritime safety and security.

The issues related to the ocean governance are twofold. The first issue that needs to be solved is the dispute on the sovereignty over the "Eparses Islands" between France and Madagascar. The resolution of this dispute is of high importance for the country as it is the basis of the maritime zones claim and the foundation of a prosperous future in terms of energy as the maritime zones around the 'Eparses Islands" have several oil and gas reserves. However, the resolution of this dispute depends not only on political will but more on the existence of expertise in field of the law of the sea, diplomacy, and maritime technical and scientific domain. Once the dispute on the sovereignty over the "Eparses Islands" is resolved, it will be easier to settle

Solution

the maritime boundary delimitation between Madagascar and its neighboring countries. The second issue related to ocean governance is the lack of national maritime policy. Linked with this absence of national maritime policy is the non-existence of an organizational structure ensuring the overall coordination of the activities of all administrations involved in ocean governance.

In the area of maritime safety, Madagascar suffers from the lack of qualified





human resources, because the retired qualified personnel were not replaced over years. Hence, there is a need of training and recruiting of maritime lawyers, maritime administrators and marine surveyors. This will boost and strengthen the regulatory work and supervision of maritime safety attributed to the APMF. One of the biggest problems in the field of maritime safety is related to the age of the fleet which is very old and causes enormous issues in maritime casualty. As far as maritime security is concerned, the insufficient means, in terms of funding and assets, to ensure a proper maritime surveillance, is the main issue regarding the ability of Madagascar to face the maritime threats mentioned previously.

Conclusion

As an island state, Madagascar has lots of potentials in the maritime domain either in terms of marine resources or maritime activities. However, due to a certain number of issues in ocean governance, and in maritime safety and security, the development of the maritime sector in Madagascar faces obstacles. In this regard, the solutions reside in the establishment of a national maritime policy and an organizational structure which will permit the overall coordination of the activities conducted by all the State departments and stakeholders involved in the maritime domain. In addition, there is a real need in terms of capacity building in the field of human resources and in the area of operational and financial means in the maritime sector. Apart from the political will, international cooperation is one way through which Madagascar can overcome these challenges. In this perspective, the supports of the international organizations such as IMO and the UN (through its Department of the Law of the Sea), the regional organizations such as the AU, SADC and IOC, the bilateral cooperation with experienced maritime nations like Japan, France, UK, South Korea, etc., the NGOs programs such as the Nippon Foundation maritime programs like the WMU Sasakawa Fellow are indeed wished.

DAR ES SALAAM PORT

Stella Joshua KATONDO, Tanzania

BRIEF INTRODUCTION

Dar Es Salaam port is Tanzania principal port owned and operated by Tanzania Ports Authority (TPA) with a rated capacity of 4.1 million DWT dry cargo and 6.0 million DWT bulk liquid cargo. It has a total quay length of about 2,000 metres with 11 deep-water berths.

The Port is headed by the Port Manager who is assisted by the Assistant Port Managers on Operations and Technical while the other is for Administration and Finance matters. it operates 24/7 with three 8 working hourly shifts/day.

The port handles about 95% of the Tanzania international trade and it also serves transit to and from the landlocked countries of Malawi, Zambia, Democratic Republic of Congo (DRC), Burundi, Rwanda and Uganda. The Port conveniently facilitates trade not only to and from East and Central Africa countries but also to Middle and Far East, Europe, Australia and America.

Some countries that rely on the Port of Dar es Salaam have their own cargo centers near the port to clear and forward cargoes destined for that country. Mukuba Tanzania Limited and Malawi Cargo Centers Limited (MCCL) owned by Zambia and the government of Malawi respectively.

1. Terminals in the Port

The port is divided into four (4) main terminals; Grain, Oil and General Cargo, owned and operated by TPA while Container is operated under lease contract by Tanzania International Container Terminal Services (TICTS).

(Grain Terminal)

The Grain Terminal has silo with holding capacity of 30,000 tons of cargo and is aerated and temperature-controlled, used for import and export of grains like maize, rice, and wheat.

(Oil Terminal)

Oil terminal has two basic handling stations, the Kurasini Oil Jetty (KOJ) with facilities which are capable of handling coastal vessels of 5,000 DWT and deep-sea vessels up to maximum size of 45,000 DWT of refined products and a Single Point Mooring (SPM) which handles crude oil with allowable capacity of receiving ships of maximum size of 120,000 DWT.

(General Cargo Terminal)

General Cargo contains seven deep-water berths with 7 covered sheds covering $80,000m^2$ and total open storage areas of $50,000m^2$ divided into four sections; A, B, Lighter Quay (L.Q.) and Motor Vehicle each headed by Principal Operations Officers (POO); is the P. O. O. of Motor Vehicle section.

Berth no. 1, 2, 3 and 4 are for Section A while 5, 6, and 7 falls under Section B. These sections receive deep sea vessels while Lighter Quay handles lighterage and coastal vessels for both cargo and passengers. They are all having storage facilities; covered (sheds) and open (yards)

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for cargo and other amenities for passengers.

(Motor Vehicle Section)

Motor Vehicle Section is an exclusive subdivision in General Cargo Terminal (GCT) which handle wheeled units from vessels docking at the earlier mentioned sections. The section has a paved parking yard capacity of about 4,000 units.

The container terminal has three berths having length of 540 meters with capacity to handle 250 thousand TEUs per annum which is operated by TICTS. This terminal covers about 18 hectares and contains 12,000m² paved area with slot capacity for 6,255 TEUs.

Operations Department

The Department is headed by the Operations Manager assisted by POO, two (2) sitting at the Operations Manager's office supporting in Operations Planning & Performance while the second deals with Administration matters of the department. The other four (4) including myself are heading the said sections.



2. HIERACHIAL FUNCTIONING OF MOTOR VEHICLE SECTION

(Motor Vehicle Section)

As mentioned earlier the section is being headed by Principal Operations; myself, assisted by two Senior Operations Officer (SOO) and then the hierarchial falls as it has been shown in the organization chart above.

(My Duties as Principal Operations Officer Motor Vehicle)

- To participate in implementation of operational plans as received from authority
- An overall supervisor in operational activities as well as administration matters concerned in the section
- To ensure a well recording and reporting system is maintained in the section
- To liaise with Dry Ports / Inland Clearance Depot (ICD) operators in smooth running of operations.
- To maintain close and good communication with Car Carriers/Ro-Ro vessel Shipping Agents.
- To perform any other related duties as may be assigned.

(Motor Vehicle Section Objectives)

The section handles new and second-hand imported vehicles from small cars to large buses and trucks intended for local, transit to neighboring countries served by the port and some few transshipment units to neighboring isles of Comoro, Unguja and Pemba. It also manages the abnormal heavy loads such as earth-moving equipment and plants often in conjunction with motor vehicles.

Tanzania being a developing country has no motor car industries for exports hence most of the traffic the section handles is imports.

Dar Es Salaam Port has experienced exponential growth with throughput volumes soaring from as little as 26,856 units a year in 2004 with an average of 2,238 units per month to 101,443 units as at September 2013 with average units per month of 11,271.

The growth of motor vehicle throughput is one of the TPA's great successes. Initially driven by the individual demand and financial capability of owning motor vehicles for Tanzanian citizens, as well as neighboring countries serviced by the port. Another reason is massive construction of different infrastructures continuing in the same countries, due to economic reforms.

Taking a sample of motor vehicle statistics for 10 consecutive years, the graph here below explains the growth in data.





MOTOR VEHICLE TRAFFIC - DAR ES SALAAM PORT YEAR 2004-2013

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Jan	2,264	2,064	2,347	2,697	3,596	4,342	4,315	4,037	5,063	8,134
Feb	2,068	3,955	2,886	3,154	3,722	2,376	3,662	7,132	7,287	9,423
Mar	2,428	3,153	3,014	3,996	5,775	4,269	5,549	7,161	9,683	13,316
Apr	1,984	1,884	3,390	2,619	4,406	3,555	5582	4,999	8,508	12,946
May	2,150	2,584	2,895	3,559	3,852	4,236	4677	7,647	11,609	7,795
Jun	1,913	2,513	3,559	2,997	4,647	4,826	4310	7,059	8,125	12,519
Jul	1,982	2,518	2,947	3,521	3,432	4,236	4625	5,915	7,091	10,371
Aug	2,351	3,329	3,170	3,222	5,344	4,864	5751	5,889	7,133	14,532
Sep	3,062	2,965	2,558	5,491	4,847	3,739	5909	6,757	11,230	12,407
Oct	3,511	2,913	3,849	2,924	4,913	4,525	6579	8,781	12,006	
Nov	810	2,675	2,021	2,983	5,143	4,475	7294	8,218	10,585	
Dec	2,333	2,306	3,133	3,900	5,323	6,267	7012	7,909	16,650	
Total	26,856	32,859	35,769	41,063	55,000	51,710	65,265	81,504	114,970	101,443
Average Per Month	2,238	2,738	2,981	3,422	4,583	4,309	5,439	6,792	9,581	11,271

3. REASONS FOR THE GROWTH

Efficient and reliable inland transport i.e. rail and road, is a key factor for cargo off-take. As of now, Dar Es Salaam port is facing problem in transportation of its cargo to and from the port because rail and road are not in good shape but motor vehicles as cargo does not depend on availability of carrying units rather they are self-driven hence enjoying being driven out of the gates (delivery) immediate after being discharged without delay. This becomes another catalyst to importers of motor vehicles.

Economic reforms of countries in the whole area of East, Central and Southern Africa has attracted investors to construction works of different infrastructures hence calls for importing large amount of motor vehicles and equipment.

Alongside with the said reforms, a raise in economic and financial power of citizens of these countries has contributed an increase to ability of owning cars.

Availability of credits from banks and awareness of its availability have been another factor which has led to increase in cars importation for Tanzanians and other nations from countries served by Dar Es Salaam port.

4. CHALLENGES ARE FACING IN UNDERTAKING OF MY ACTIVITIES AS A HEAD OF THE SECTION

• Yard capacity constraints

Due to an increase of the amount of units handled by the section the available yard capacity is not sufficient

Insufficient workforce

In comparison to an increase in number of units handled, labor requirement has also increased



so as to serve the intended customers satisfactorily.

- Improper Motor vehicles yards hinders enforcement of safety regulations difficult. Most of the yards are in temporary arrangement awaiting port modernization project to take place in the near future therefore they are not proper motor vehicle yards hence enforcement of safety regulations becomes difficult.
- Non-interfacing in systems used in handling vessels and cargo in port. This brings problems of double working in application of the two.
- Lack of understanding of dry ports/ICD concepts to customers importing motor vehicles Customers do except to receive their cars the port not to an extension.

5. SOLUTIONS TO THE CHALLENGES

Capacity Constrains

The port has entered into contract with private operators who will be handling motor vehicles as extension of the port into their yard as Dry Ports/Inland Clearance Depots. Contracts have been signed by three (3) operators since August 2012. The contracted companies are Farion Trading Limited, Mas Holding and Container Depots and Trans Africa Logistics Limited.

• Insufficient Staff

Training for Staff is ongoing activity in corporate plans of TPA so as to ensure the institute is having a team of qualified staff to deliver intended services.

There has been hiring of casual staff to curb the situation of insufficient staff. Moreover in the TPA's corporate plans procedures of hiring permanent labor is on process.

• IT utilization

Interfacing of systems currently used i.e. Cargo Management and Risk System of Tanzania Revenue Authority (T. R. A.) and Cargo System of T. P. A. for handling vessels and cargo which will serve time and other resourse in operations.

Emphasizing in IT systems in carrying out of all motor vehicle handling.

KENYA MARITIME INDUSTRYCOUNTRY REPORT

Kennedy KISHAWI, Kenya Stephen Mwamure TOYA, Kenya Samwel Kipkosgei KIPTOO, Kenya Elsie Nyabonyi BIKONDO, Kenya

Kenya has a coastline that stretches 480 Km along the Indian Ocean from Somali in the north to Tanzania in the south. This coastline is endowed with one major port in the region, the Port of Mombasa, and other ten (10) Small Ports. The potential of these small ports are limited because most of the development activities are concentrated along the LAPPSET Corridor which is served by the Port of Lamu and Mombasa-Nairobi corridor which is well served by the Port of Mombasa. Also as seen in the Map below in Fig 1.0, the hinterland connections are good and distances are small.

EAST AFRICA EAST COAST



Figure 1.0 Map with port locations

Kenyan maritime industry is majorly built around port and port related activities. The Port of Mombasa serves a crucial Economic lifeline not only for our Economic but also the economies of regional Countries. Due to its strategic position, the port is the gateway into the rich Landlocked countries of Uganda, Rwanda, Burundi, northern part of Tanzania, DRC and South Sudan


KENYAN MARITIME FIELD EXPLAINED

The Government of Kenya has put in place systems and mechanism to boost the industry and maximize its potential to become a Maritime Nation in the region through enactment of relevant international treaties into the domestic legal frame work. This has seen the opening up of the sector to international market in the last one year in terms of increased trading partners, increased home grown STCW'95 certified seafarers, gaining international recognition and support in fighting piracy and prosecuting the perpetrators in Kenyan law courts; a role that has been declined by many nations in the region, establishing a central command for Regional Maritime Rescue Co-ordination Centre (RMRCC), and in the process enhanced its capacity to subscribe to International Maritime Conventions (Laws) and effectively enforce their implementation in the country.

This has been possible by establishing Organizations that have effectively championed the Maritime Industry development of the nation to its current status. This includes;

Kenya Ports Authority

Kenya Maritime Authority

Kenya Ports Authority (KPA)

The Kenya Ports Authority (KPA) is a Government Parastatal Organization established on 20 January 1978 through an Act of Parliament. The KPA is mandated to maintain, operate, improve and regulate all scheduled seaports on Kenya's coastline under the Ministry of Transport.

The Kenya Ports Authority's vision is "World class seaports of choice". Its mission is "To facilitate and promote global maritime trade through provision of competitive port services". KPA has a view to improve service delivery strategies, enhancing its relevance and promoting a more positive and dynamic maritime industry. The efforts of KPA are geared towards efficient and least cost promotion of trade aimed at catalyzing the economic growth of the port hinterland.

The Authority's current presence along the coast is only in Lamu and Mombasa, whereas the rest considered to be small ports are being administered by the Kenya Revenue Agency (KRA) on behalf of KPA.

Other KPA ports include Kiunga, Ngomeni, Malindi, Kilifi, Takaungu and Mtwapa, are in north coast whilst Shimoni, Funzi and Vanga are found in the South coast. Apart Port of Shimoni, the Customs Department of KRA is charged with the responsibility of collecting KPA's dues.

The facilities in these ports were developed by the then Ministry of Works and the Fisheries Department in the late 1970 and early 1980s.



C I	The Role of Small Ports and their Potentials	
Sector	DESCRIPTION OF POTENTIAL	POTENTIAL SMALL PORTS
Agriculture	Highly relevant industry (tea, coffee, sugarcane, coconut/cassava, sisal, cotton, livestock). If production interventions are made, the coastal region has the potential to become self-sufficient in food production. Logistics and markets are to be improved.	Small Potential Mainly local and national consumption: distribution over land. International trade concentrated in Mombasa and Lamu
Fisheries	Relevant coastal industry. The annual inshore artisanal fishery catch is 6,000MT whereas the potential is over 10,000MT. Furthermore it is planned to unlock the offshore fisheries potential of approximately 150,000MT (Lamu Master plan) to 350,000MT (CDA). Need for industrial fishing port in Lamu	High Potential Small ports have a role in facilitating the inshore fisheries. For offshore fisheries, there could be potential for one additional semi-industrial sea port
Mining	Small industry, but rising. The potential depends on plans of individual mining companies. Titanium is exported via Likoni (Base Resource Ltd.). With the new discoveries of minerals in South Coats, there is need for a dedicated port, Shimoni being quite viable. Limestone is spread over the coast. There is no demand for a dedicated port (Bamburi). Oil export from the region (Sudan) will be concentrated in Kiunga and Lamu Port.	High Potential Concentration in Kwale where Titanium is being mined and more large deposits of precious metals have been found with ability to expand the South-Coats ports of Shimoni, Funzi and Vanga. Ngomeni has potential to become a major salt exporting port. Kiunga / Lamu has the potential to become an oil terminal following large deposit of oil in NoTurkana, in the northern Kenya.
Manu- facturing	Important sector to create value. The aim is to contain value addition in Kenya rather than exporting raw materials (tea, sugar, paper). It is planned to create a Special Economic Zone (Dongo Kundu), which will also generate trade. This sector can also include the generation of energy. Major energy plants that require fossil fuels will be concentrated at Mombasa and Lamu, where the import can be accommodated more easily.	Minimal Potential Manufacturing will generate port trade, but national distribution is over land and international trade is concentrated at Mombasa and Lamu.
Wholesale & retail	"Creating formal market outlets for small scale operators, who will graduate to the formal sector then" is an objective in the Kenyan Vision 2030. The small ports have a function in providing access to the formal markets	Inclusive Potential The small ports could include a market place and they should facilitate a proper distribution to the markets
Tourism	The most important sector along the coast with a potential for further development. In Vision 2030 resort cities are planned at Kilifi and Diani Beach, while the Lamu Master plan envisages a resort city as well.	High Potential Marinas, (eco-)tourism trips and waterfront development. Cruise vessels to attractive centres such as Mombasa or areas close to wild life parks

The Role of Small Ports and their Potentials in Kenya



PORT SERVICES

Mombasa Port is a mix port handling all types of vessels including passenger, containers, dry and wet bulk, general cargo, Motor Vehicles and Livestock. The key activities carried out by Kenya Ports Authority include:

- Marine Services: Pilotage, towage, mooring, dry docking, provision of aids to navigation and maintenance of the channel and the turning basin.
- Stevedoring and shore handling services: Cargo handling services for containers, general cargo, dry bulk, bulk liquid and reception of cruise ships.

CONTAINER TRAFFIC

Between 2008 and 2012, container traffic grew by 10.1 percent, rising from 616,000 Twenty Foot Equivalent Units (TEUs) to 903,000 TEUs. Other than being an extremely impressive rate of growth, it reflects penetration of containerization.

Cargo throughput handled has increased progressively as shown below

Statu s of cargo	200 1	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Avg.Growt h
IMP.	8,299	7,844	9,257	10,017	10,700	11,845	13,061	13,311	16,508	16,201	16,938	18,732	8.0%
EXP.	1,999	2,380	2,068	2,494	2,278	2,255	2,474	2,685	2,449	2,575	2,788	3,045	4.5%
T/Ship	303	340	605	409	303	318	426	419	105	158	227	143	-6.6%
GRAND TOTAL	10,60 1	10,564	11,931	12,920	13,281	14,419	15,962	16,415	19,062	18,934	19,953	21,920	7.0%

Table No 1 : Throughput (000)DWT)-2001-2012

AVERAGE TURN ROUND TIME

The port of Mombasa has reduced the amount of dwell time for each container from 12.6 days in 2008 ton7.1 days in 2012 in an effort to free up container storage space. As such, containers coming off the ship are not receiving as much time as before. In turn this has opened up some of the container slot and effectively increased the capacity of handling yards.

To enhance further efficiency the Authority has embarked on ICT with implementation of SAP to handle office maters and billing while KWATOS to handle cargo tracking and documentation process

Table No 2 : Summary of Conventional	I Cargo Throughput (000 tons)
--------------------------------------	-------------------------------

Main commodities	2008	2009	2010	2011	2012	Average Growth
Iron &steel	595	780	826	833	854	10.1%
Vehicles	334	296	283	293	332	0.3%
Clinker	1013	1135	1428	1368	2268	24.9%
Fertilizer	236	388	366	380	336	12.7%
Coal	174	162	236	346	291	17.4%
Vehicles	87,284	95,798	95,604	105,048	120,268	8.5%

SOPRF

POLICY AND DEVELOPMENT FRAMEWORK

The Policy and development framework for the Port of Mombasa is anchored on the Vision 2030 and the National transport sector policy, Port Master Plan, Port Strategic Plan, Business Plan and other Government Documents that have set the policy frame work for reform of the transport sector.

Port Development

Construction of Berth 19 by Chinese Company.

The construction of berth 19 by an extension of 240 meters quay length has given a combined quay length of 840 meters from berth No 16-19 and an additional stacking capacity of 200,000 TEU per annum.

The project also includes procurement of requisite equipment and installation of other facilities.

The construction of Berth 20,21,& 22 by Japanese under the consultancy of JICA.

The table also shows the projected volume of containers for the 3 berths build on 100 hectares at the western side of the existing Kipevu Oil Terminal ("KOT") to create an additional capacity of 1.2 million TEUs.

Project	2012	2013	2015	2016	2020	2025	2030	TOTAL
Current	850							
Berth 19		200						200
2 nd container				450				450
Phase 1					400			400
Phase 2			-			350	-	350
TOTAL	850	1,050	1,050	1,500	1,900	2,250	2,250	2,250

Table No 3 : Projected additional capacity based on Port Development Plans

Development of Dongo Kundu Free Port

Proposed development of free port facilities on 3,000 acres of land owned by the Authority at Dongo Kundu area in Kwale County through public private partnership arrangement.

Lamu Port South Sudan and Ethiopia Transport Corridor (LAPSSET)

Development of a new transport corridor linked with Ethiopia and South Sudan through a road network and a standard gauge railway line via Garrisa, Isiolo, Moyale, Maralal, Lodwar and Lokichogio.

Port Security

The port of Mombasa is already ISPS compliant. To further boost port security, the Authority has implemented an integrated security improvement program to safeguard it from port intrusion. The project was completed in June 2013 with support from the World Bank and it entail procurement of modern security equipment including surveillance technology like CCTVs,



perimeter fencing and introduction of electric gate pass system to enhance security surveillance of the port and its surroundings. The system is fully functional now.

Kenya Maritime Authority (KMA)

Kenya Maritime Authority (KMA) was set up in June 2004 as the semi-autonomous agency in charge of regulatory oversight over the Kenyan maritime industry. Maritime safety and security is one of the Authority's core functions.

The Roles of KMA

Regulatory arm of GOK

KMA strengthen national maritime administration through enhancement of regulatory and institutional capacities for safety and security, fostering effective implementation of international maritime conventions and other mandatory instruments on safety & security, promoting maritime training, coordinating Search and Rescue, preventing marine pollution and promoting preservation of the marine environment as well as promoting trade facilitation and maritime investments. The enactment of a new Merchant Shipping Act, 2009 has enhanced delivery of services by the Authority in these areas.

Port State Control

Foreign Ships calling at the port of Mombasa, Kenya are inspected by KMA ship surveyors in accordance with (IOMOU) Indian Ocean Memorandum of Understanding on Port State Control to which Kenya is a member. This is to ensure that ships comply with safety of life and safe manning regulations, protection of the marine environment regulations and load line regulations, among others.

Search and Rescue

As part of our core mandate Kenya Maritime Authority is responsible for the operation of the Regional Maritime Rescue Co-ordination Centre (RMRCC), now also known as the Mombasa Information Sharing Centre(ICS). The Centre provides a communication center where seafarers can call in for help in cases of distress while at sea, in a large area covering Tanzania, Seychelles and Somalia as well as receiving and responding to piracy alerts and requests for information or assistance at all times.

Training of Seafarers

Kenya Maritime Authority has been in the lead in promoting maritime training and education in Kenya. Kenya's recent entry into the International Maritime Organization's (IMO) White list status was an affirmation that Kenya's maritime education now meets international standards, enabling its seafarers to compete for jobs on international ships the Authority has intensified its focus on boosting the image of the maritime industry and supporting cadet recruitment among the youth, including the recruitment of female cadets.

Others

(a) The Authority is further committed to implementing International Maritime

Organization(IMO) programs aimed at the integration of women in the maritime sector in answer to Millennium Development Goal number three, "Promoting gender equality and empowerment of women" in the maritime sector.

(b) By regulating and overseeing orderly development of merchant shipping and related services, the Authority aims to make a positive impact on trade facilitation in Kenya and in the promotion of maritime investments in the country.

Major players in the Kenyan Maritime industry

	Í.		t maritime players in fugures
No	Item of Discussion	Figures	Remarks
01	Number of MajorPorts	1	Port of Mombasa; Note : Construction of Lamu Port is underway and it is envisaged to be the biggest Port at its completion with 39 deep water berths as compared to the 19 berths of Port of Mombasa
02	NumberofSmallPorts	10	Kiunga, Lamu, Ngomeni, Malindi, Kilifi, Takaungu, Mtwapa, Funzi, Shimoni & Vanga
03	Fleet		Kenya practices Open Register but due to stringent measures applied by the Kenya Maritime Authority (KMA), the fleet size has seen a nose dive.
04	Seafarers.		Kenyan seafarers suffered a major setback when it was not white listed. The process saw many experienced seafarers loosing employment. GOK managed to develop a legal frame work that would allow fully implementation of STCW 95 under KMA and attained White List status in
05	Number of accidents in the last five years (persons and cargo affected)	0	No incident
06	Number of inspection boards used by KMA inspectors / Surveyors	0	Hire from the Port and Private Operators.
07	Marine inspectors at KMA	4	All are former KPA Marine Engineers /Pilots
08	Number of navigation Aid- Llght houses	6	
09	Number of Light beacons	37	
10	Number of Light buoy	27	
11	Number of navigation Aids maintenance boats	3	1 dedicated tug boat , and 2 mooring boats
12	VIS		Fully fledged VTS station and one backup providing information and traffic services.Equipped with GMDSS, RADARS, and AIS.

Table 3.0 Summary of maritime players in fugures



2.0 MAJOR THREAT TO MARITIME INDUSTRY IN THE REGION

2.1.0 Insecurity & Piracy Threat

Piracy along the Somali Coastline has been a major interference to sea trade and associated activities to Kenya through the Port of Mombasa. The Cruise terminal at the Port is almost turned to a car carrier terminal following the withdrawal of Mombasa port by cruise lines due to this menace. Tourism in Kenya by cruise ships has suffered downward trend since 2006.

Somali Pirates objectives are to seize ships and Crew members for ransom. The Cruise ships were very vulnerable and soft targets hence the withdrawal.

Current Trends;

International Chamber Commerce (ICC) International Maritime Bureau (IMB)'s global piracy report released on the 15 July 2013, it showed that Somali piracy has fallen to its lowest levels since 2006, and attention has been shifted to violent piracy and armed robbery off the coast of West Africa.

Worldwide, the IMB Piracy Reporting Centre (PRC) recorded 138 piracy incidents in the first six months of 2013, compared with 177 incidents for the corresponding period in 2012. Seven hijackings have been recorded this year compared with 20 in the first half of 2012. The number of sailors taken hostage also fell dramatically; down to 127 this year from 334 in the first six months of 2012.

According to ICC International Maritime Bureau (IMB) update on piracy dated 31 August 2013 the following are the worldwide trends on piracy;

INCIDENTS	HIJACKS
176	10
10	2
	176

On what was entitled as Somali clamp down, it was reported that in East Africa's Gulf of Aden and Somalia, eight piracy incidents including two hijackings were recorded in the first six months of 2013, with 34 seafarers taken hostage (<u>IMB Piracy Report highlights violence in West Africa</u> of Monday, 15 July 2013).

Incidents which occurred between 2010 to 2013

Table 5. is a summary of Somali piracy events and threats at Horn of Africa

No	VESSELS HIJACKED	2013	2012	2011	2010
1	Vessels Hijacked	6	7	27	51
2	Boarding	0	1	17	16
3	Vessels Fired Upon / Attempted Boarding	2	24	122	119

Source: Maritime OPINTEL Report; (U) Somali: Piracy Analysis (PAWW) Report, July 2013

The significant drop in the frequency and range of attacks by Somali pirates is attributed

to actions by international navies; preventive measures by merchant vessels, including the deployment of privately contracted armed security personnel and not forgetting the intensified war on terrorism by the Amason forces on the mainland. This has weakened the operational base and support to these pirate gangs (http://www.icc-ccs.org/piracy-reporting-centre/request-piracyreport) Thus the downward trend which has been attributed to intensified counter-piracy efforts supported by the International Community and the region states.

If the momentum can be maintained, the Port Mombasa shall reap the benefits of the war on piracy by reclaiming the shipping lines which stopped calling the port, e.g. Cruise lines, etc. and realize increase in maritime industry in Kenya.

2.1.1 KENYA PORTS AUTHORITY SWOT ANALYSIS

SWOT Analysis for Kenya Ports Authority

	STRENGTHS		WEAKNESSES
1.	A Natural deep sea harbor	1.	Resistance to change
2.	Vast hinterland & strong captive market	2.	Lack of well-established market research
3.	Clear Policy and strategy road maps governed by	3.	Bureaucracy
	the Port Master Plan and Business Plan	4.	Ageing workforce
4.	Good Corporate governance system that ensures	5.	Skills deficiency in engineering, policy and planning,
	accountability and transparency within the		plant operators
	organisation.	6.	Cumbersome, procurement procedures
5.	Leverage on ICT and MIS system to enhance	7.	Inadequate cargo handling equipment particularly
	communication and efficiency		at conventional cargo berths
6.	Strong capitalization base	8.	Weak-Labour-Management Partnership
7.	Relatively new & reliable equipment compliment	9.	Limited land resource within the immediate port
8.	Compliance to ISPS, ISM, ISO Management systems		vicinity for expansion
9.	Stakeholders forum	10.	A bureaucratic documentation process with too
10.	Private sector involvement		many cargo interveners
11.	Committed & competent management & support		
	staff		
	OPPORTUNITIES		THREATS

TUNITIES	

- 1. Greater penetration into transshipment & transit cargo markets
- 2. Strategic location vis-à-vis Asian & European markets
- 3. Political & Economic stability in region
- 4. Development of Free Trade & Special Economic Zones 5. Political interference 5. Growth in international trade buoyed by the robust
- growth rates in China & India
- 6. Improvement of northern corridor road & railway infrastructure
- 7. Expansion of East African Common Market
- 8. Growing economies in region
- 9. Goodwill from GOK & increased donor and development partner involvement in maritime & port development
- 10. National Single Window System
- 11. Development of financial market
- 12. Development of second terminal
- 13. Development of Lamu port
- 14. Development of Free Port area

- 1. Global shipping trends 2. Unpredictable pattern of trade
- 3. Competition from neighboring & regional ports
- 4. Instability in financial market
- 6. Political stability
- 7. Insecurity & piracy (see Piracy Threat)
- Poor road & rail hinterland connectivity 8.
- 9. Increased globalization of economic issues & trade relations
- 10. Government regulation on investment
- 11. Environmental concern
- 12. Unreliable power supply
- 13. Strong workers union



GOK ministry ORGSTRUCTURE



PLACEMENT OF SASAKAWA FELLOWS

No	FELLOW	CLASS	COURSE	CURRENT POSITION
01	Musa Hassan Musa	2000	MET	Managing Director Kenya Ferry Services
02	Kennedy Kishawi	2001	MET	Assistant Lecturer Technical University of Mombasa. (Marine Engineering section)
03	Stephen Toya	2002	MSEP	Principal Marine Engineer, Kenya Ports Authority
04	Samuel Kiptoo	2003	PM	Senior Operations officer Kenya Ports Authority
05	Elsie Bikondo	2012	MET	Senior Personnel Officer Kenya Ports Authority



Current Situation of Sea Transport in Ethiopia

Feseha Andualem GETU, Ethiopia

Ethiopia is a country located in the Horn of Africa. It is bordered by Eritrea to the north, Djibouti and Somalia to the east, Sudan and South Sudan to the west, and Kenya to the south. With over 91,000,000 inhabitants] Ethiopia is the most populous landlocked country in the world and the second-most populated nation on the African continent. It occupies a total area of 1,100,000 square kilometers (420,000 sq mi),



Figure 1: The Government Department where Ethiopian Sasakawa Fellow working is shown in bold type.

1. Shipping

Ethiopian Shipping & Logistics Enterprise is a sol and monopoly state owned shipping service provider for Ethiopian Import shipments, it has provides a regular liner service mainly moving general, bulk and containerized cargo. Since its establishment in 1966.

The company has served the country for the past 47 years, transporting cargo safely throughout instability in neighboring countries, and is run by highly qualified national top management and shipping experts, both ashore and on board vessels. It is the leading indigenous shipping company within the COMESA countries. The government of Ethiopia encouraged the company to develop in this important maritime sector with policies that create competitive advantage.

 $\mbox{Ethiopian Shipping \& Logistics Enterprise currently owns 13 General Cargo Vessels and two tankers .$

2. Training and development

In Ethiopia there are two training initiatives. The Babugaya Maritime Training Institute offers short-term training programs to bring ratings up to the international standard required

Expansion of WMU Sasakawa Fellows' Network

by IMO. The Ethiopian Maritime Training Institute has been established through strategic partnerships in accordance with the global maritime practices and standards to train and educate over 1,000 marine engineering officers annually, making Ethiopia a major exporter of high-quality marine professionals to the global maritime labor market. The government of Ethiopia gives full-scale support.



3. Shipping Lines, Freight Forwarders and Shipping Agents in Ethiopia

In Ethiopia there is only and only one State owned monopoly Shipping Company, Ethiopian Shipping & Logistics Enterprise and 81 registered Freight Forwarders & Shipping Agents.

4. Ports

Ethiopia is landlocked country and was by agreement with Eritrea using the ports of Massawa and Assab; since the Eritrean-Ethiopia, Ethiopia has used the port of Djibouti for nearly all of its imports. Only one river, the Baro is used for transport.

Р	otential C	Corridors o	of Ethiopi	a
Djibouti	Eritrea	Somalia	Sudan	Kenya
Djibouti Port	Assab	Berbera	Port Sudan	Mombasa
	Massawa	Mogadishu		



Special Lectures

WMU SASAKAWA FELLOWS' NETWORK MEETING IN THE AFRICAN REGION

Fundamental problems in Maritime Education and Training field in Asia Toshio Hikima, Marine Technical College, Japan

Development of the Djibouti Code of Conduct (DCoC) Osamu Marumoto, Counter-Piracy Project Implementation Unit, International Maritime Organization (IMO)

Fundamental Problems in Maritime Education and Training Field in Asia

Toshio HIKIMA, Marine Technical College, Japan

1. Introduction

There are international treaties related with maritime affairs such as SOLAS for the purpose of maritime safety and protection of human life and property, MARPOL for the purpose of protection of marine environment, STCW which established requirements of seafarers, etc. Regulations have been tightened and environments surrounding seafarers have been changed by revision of these international treaties and seafarers are requested to acquire more advanced knowledge and skills.⁽¹⁾

In recent years, with the increasing living standards and economic growth, the wages of the Japanese seafarer have witnessed a steady rise. Given the wide range of career opportunities that are available to the Japanese youth today, seafaring does not always receive the priority that it did in the past. In the emerging global economy, which is characterized by a high degree of competition, ship owners all over the world are seeking to minimize their manning costs. This tendency has resulted in: flagging out, divorcing of ship management from ownership and outsourcing of manning from developing countries. Multi-national crews have become the order of the day. With seafarers originating from a wide range of Maritime Education and Training (MET) institution from across the world, the issue of variations in their competencies emerged as an area of concern with respect to safety and efficiency of operations.⁽²⁾

Crew size depends on the size and complexity of the vessel. Table1 shows crew size of type of vessels. When some Japanese shipping companies build new large size vessels like a VLCC and a container vessel, vessels have a class room and cadet's rooms for on-board training. It takes a huge cost for cadets to develop cadets' ability.

Vessel Type	Crew size	Size (DWT)					
VLCC	24-26	200,000 - 300000					
Suezmax	22-24	160,000					
Aframax	21-24	80,000-120,000					
Panamax bulker	20-24	60,000-80,000					
Handy bulker/ reefer	20-22	10,000-35,000					
LNG / LPG	20-24	$125,000 - 170,000 \text{m}^3 / 75,000 \text{m}^3$					
Product tanker Automated	20-24	5,000-40,000					

Table1. Crew and size of type of vessels

2. Crewing Vessels with Competent Seafarers

Crewing vessels with competent seafarers is a growing global problem and that crewing is high on the list of business issues for all shipping companies. The global fleet has far outgrown the supply of trained seafarers, with an especially acute shortage of trained officers. Most of Japanese shipping companies have already employed many foreign seafarers as officers and ratings and foreign officers should be promoted to captain and chief engineer in Japanese merchant fleets.

The Government of Japan is supporting developing countries of the world under the Official Development Assistance (ODA). In maritime affairs, there are some programs to send Japanese experts to Maritime Education and Training institution, as well as some training scheme inviting young lecturers from those countries to Japanese Maritime Institutions.

Marine Technical College (MTC) has short-term training courses in technical and regulation matters for foreign seafarers in Japan and Manila as well. To educate for foreign seafarers is very important for Japanese shipping companies to operate vessels safely. Japanese shipping companies think that to give some kinds of education for seafarers is very important, but it is difficult to give them due to seafarers' vacation system. The most shipping companies have no own training center and they requested MTC to give some kinds of training courses for their seafarers. The MTC and the companies have been setting dependent on the terms and new contents based on practical studies for safety operation and ship management together.

Table 2 shows foreign seafarers in Japanese merchant fleets. Almost three quarters are Filipino seafarers in the fleets. It is easy to understand this matter due to Filipino seafarers cast. Japanese shipping companies should take money and train Filipino seafarers to be competent seafarers.

Japan	Philippines	China	India	Myanmar	Korea	Vietnam	Indonesia	Croatia	Others	Total
1,504	29,171	2,392	1,910	1,596	1,211	849	536	366	969	40,504
3.71%	72.02%	5.91%	4.72%	3.94%	2.99%	2.10%	1.32%	0.90%	2.39%	100%

Table2. Foreign seafarers in Japanese merchant fleets

At the same time in case of young cadets, some of Asian countries lack of training ship and/ or merchant vessels, for 12 months onboard training required by STCW 2010 Manila amended, tends to deprive them of the opportunity to acquire Certificate of Competency. To support them, Japanese government has started the so called "ODA Seafarers Training Scheme" since 1990.

MTC has received above mentioned foreign young cadets from Philippines, Indonesia, Vietnam and Bangladesh since 1990 until 2010. Table3 shows total number of cadets from these 4 countries.

Philippines		Indonesia		Vietnam		Bangladesh		TOTAL
Ν	Е	Ν	Е	Ν	Е	Ν	Е	IUIAL
457	392	97	101	52	54	31	31	1.015
849		19	98	106			1,215	

Table3. Intake of cadets from 4 countries over the years

3. Manpower 2010⁽³⁾

In the background of international shortage of seafarers, shipping enterprises in the world are increasing dependence on seafarers of developing countries. Furthermore, seafarers are requested to acquire the wide range of ability concerning all aspects of ship management as well as conventional ability of operation skills of vessel.

The BIMCO/ISF Manpower Update provides the most comprehensive assessment of the global supply and demand for merchant seafarers that are currently available. BIMCO and ISF updated various global supply/demand balance scenarios for the next decade. The benchmark scenario represents BIMCO and ISF's view of the most likely trends, based on recent developments and the opinions of key players taken from the various surveys conducted for the study.



Overall the situation in 2010 is one of approximate balance between supply and demand, although there is evidence of a slight (2%) shortage of officers. Shortages are more acute in specialized sectors such as tankers and OSVs. With regard to certain nationalities there is an underlying concern about the current and future availability of senior officers.

4. BIMCO/ISF's Conclusion

This new Update highlights that the industry is likely to face a challenging future for crewing. There are many uncertainties, but the results indicate that the industry will most probably face a continuing tight labor market, with recurrent shortages for some officers, particularly if shipping markets recover. Unless measures are taken to ensure a continued rapid growth in qualified seafarer numbers, especially for officers, and/or to reduce wastage from the industry, existing shortages are likely to intensify over the next decade. Supply appears likely to increase in many countries, but the positive trend that has been established for training and recruitment over the past few years must continue to ensure a suitable future pool of qualified seafarers.



It is important to stress that the industry requires well qualified and high caliber seafarers capable of adapting to change and handling the wide range of tasks now required of them. Any training program provided must ensure quality is not compromised in the quest for increasing quantity.

It is hoped that this new study will again help to ensure relevant measures are taken to avoid serious difficulties.

5. Fundamental problems and Maritime Sector in Asia

JICA and Japanese Government had some projects to train Maritime Instructors in their countries and Japan, but some instructors resigned from Maritime Institutes and went back to the sea. Asian Maritime sector had same fundamental problems, which are as follows:

- 1 There is a shortage of experienced ship's officers
- ② There is a shortage of experienced maritime instructors
- ③ Shore-side industries depend upon recruiting ex-officers because of their experience and skills

Concerns among young people when considering the shipping profession can be attributed to

- 1 Separation from families & friends
- 2 Short stay at ports
- ③ IT environment(Facebook, Skype & Twitter, etc.)

Sociological factors are these three and financial factors are their salary. Young people conclude that there are easier ways to make a living.

Young instructors' salary is much cheaper than seafarers in Asia. This salary problem is quite big problem for especially young instructors.

	Europe			1	North America	a	South Africa, Middle East & Asia Pacific				
Category	Crew per vessel	Average age	Average salaries *	Crew per vessel	Average age	Average salaries *	Crew per vessel	Average age	Average salaries*		
Master	Ι	48	8,750	Ι	49	11,317	I	48	8,983		
C/O	Ι	39	6,432	Ι	40	9,113	I	37	6,902		
2/0	Ι	34	3,174	Ι	36	4,795	I	32	4,050		
3/0	0-I	31	2,773	0-I	30	3,923	0-1	27	3,310		
C/E	Ι	47	8,097	Ι	49	10,974	I	47	8,784		
2/E	I	37	5,880	I	42	9,133	I	38	6,902		
3/E	I	35	3,086	I	38	4,581	I	34	4,050		
4/E	0-I	29	3,030	0-I	31	3,798	0-I	29	3,300		
Electrician	Ι	39	3,829	Ι	46	4,760	I	41	4,622		

Table4. Key officer categories and salaries⁽⁴⁾

* All salaries represent monthly compensation in US dollars.

** Salaries vary in accordance to the region in which the shipping company is headquartered and not to the nationality of the crewmembers.



Table4 shows that key officer categories on the vessels and their salaries. These salaries are quite different from Instructors' salaries in Asia.

How do we keep experienced ship's officers?

How do we keep experienced maritime instructors?

5. Conclusion

The author would like to get suitable conclusion in Accra.

6. Acknowledgements

The author would like to give their sincere thanks to many cooperators for their kind assistance.

Reference

- General Information on Maritime Safety Management for Engineering Instructors, 2009, JICA & Marine Technical College, Japan
- (2) The Seafarers Training Scheme for Asian Cadets Offered by the Government of Japan, T. Okamura & T. Hikima, IMLA12 Shanghai, 2002
- (3) MANPOWER 2010 UPDATE, BIMCO/ISF
- (4) Challenge to the industry, Securing skilled crews in today's marketplace, Deloitte 2011



Estimation of seafarer's supply and demand Table. Global Seafarers Supply by Broad Geographical Area Source : BIMCO / ISF estimates 2010								
Area		Current	supply					
	Ofiicers (1000's)	%	Ratings (1000's)	%				
OECD Countries	184	29.4	143	19.2				
Eastern Europe	127	20.3	109	14.6				
Africa / Latin America	50	8	112	15				
Far East	184	29.5	275	36.7				
Indian Sub-Continent	80	12.8	108	14.5				
All National Groups	624	100	747	100				
The current estimate of worldwide demand for seafarers in 2010 is 637,000 officers and 747,000 ratings.								

	<u> </u>	· · ·	1
Nationality	Europe (%)	North America (%)	South Africa, Middle East & Asia Pacific (%)
Philippines	34	35	30
Indians	17	16	24
North Americans		1	-
Europians	21	6 13	13
Balkans (Romanians, Bulgarians, Croats, etc.)	8	6	6
Ukranians	8	1	-
Russians	2-37	10	1
Eastern Europe (Poles, Slivaks, etc.)	\$ 1	` 3	5
South Africans	19	-	1
Other Asians (Indonesians, Sri Lanka, Pakistani,Bangladeshi	1	3	2
Japanese	-	-	10
Other	9	12	8
* 💉 Total	100	100	100































	e SUNY //www.educati					
	Category	Yeqar	Month	Category	Month	
S S	Instructors	\$35,037	2,920	-	-	
	Lecturers	\$51,126	4,261	3/O	3,923	
	Assistant Professørs	\$58,499	4,875	2/O	4,795	
	Associate Professors	\$76,727	6,394	C/O	9,113	
	Professors	\$82,846	6,904	Master	11,317	
	and a					
· · · ·						







- DPO Second Officers Full DP Unlimited Second Officers DP Advanced/DP Basic Course
- Crane Opérators Sparrows Stage 1/2/3 BOSIET/HUET OPITO approved *Marlins Test/CES 4.1



			~		2		South Ad	rica, Midd	la East &
		Europe		N	orth Ameri	ca		Asia Pacifi	
Category	Crew per vessel	Average age	Average salaries*	Crew per vessel	Average	Average salaries*	Crew per vessel	Average age	Average salaries*
Bosun	1	42	1,586	1 5	48	1,849	1	48	1,536
Able seaman	2-4	36	1,227	2-4	38	1,553	2-4	35	1,190
Ordinary seaman	1-3	30	899	1-3	29	1,266	1-3	29	920
Oiler	1-3		1,263	1-3	40	1,554	1-3	36	1,178
Wiper	1	28	850	-1	29	1,266	1	29	881
Fitter	1	37	1,549	1	• 46	1,849	1	46	1,782
Cock	1	40	1,596	1	50	1,855	1	41	1,547
Messman	1	33	711	1	35	1,283	1	31	920
Mosgman 1 33 711 1 35 1,283 1 31 920 4.1 affirst represent to store numbers 1 31 1 35 1,283 1 31 920 4.3 affirst represent number companies in 16 adurts. 4 1									









The Manila amendment STCW 2010 came in force on 1st January 2012

- Major changes and amendments were made for engine department followed by other structure of the system. The important changes to each chapter of STCW Convention and Code include:
- D Revalidation for *higher and managerial level officer* for certificate of competency (COC) issued by any governing authority.
- New and improved training guidance for crews and officer serving onboard.
- New requirements for MARPOL awareness which includes training in leadership and teamwork. 3)
- 4) Stringent measures for preventing fraudulent certificate of competency (COC) to flow in international market.
- per week for decent working of seafarer onboard.
 Introduction of Electric test Rest hour onboard has been increased from 70 hours to 77 hours
- Introduction of Electro-technical officer with approved training and COC.



Development of the Djibouti Code of Conduct (DCoC)

Osamu Marumoto Counter-Piracy Project Implementation Unit, International Maritime Organization (IMO)

Introduction — International Maritime Organization

IMO - the International Maritime Organization - is the United Nations specialized agency with responsibility for the safety and security of shipping and the prevention of marine pollution by ships. Member Governments use IMO to draw up internationally agreed standards that can be applied to all ships.

We sum up our objectives in our mission statement: Safe secure and efficient shipping on clean oceans.



IMO and Maritime Security

In the light of terrorist atrocities around the world, several of which have been aimed at transport infrastructures, IMO adopted a comprehensive set of maritime security measures in 2002, which came into force in July 2004.

The most important and far reaching of these is the International Ship and Port Facility (ISPS) Code. Among its requirements are that Governments should undertake risk assessments to establish the level of security threat in their ports, that both ships and ports



should appoint dedicated security officers and have formal security plans drawn up and approved by their Governments.

PIRACY

Somalia's 3,898 km coastline (from which 1,204 km is on Gulf of Aden) is the longest of any African country, being an ideal base to launch a piracy expedition and return to hide.

2005 IMO Assembly resolution

March 2006 - Security Council Presidential Statement encouraged "Member States, whose naval vessels and military aircraft operate in international waters and airspace adjacent to the coast of Somalia, to be vigilant to any incident of piracy therein and to take appropriate action to protect merchant shipping, in particular the transportation of humanitarian aid, against any such act, in line with relevant international law".

2007, World Food Program (WFP) Executive Director and IMO SG wrote to the Secretary-General of NATO proposing formalization of a coordination mechanism between IMO, WFP and NATO, June 2007, IMO Council endorsed proposal that UN SG bring the piracy situation off Somalia to attention of the Security Council.

November 2007, IMO Assembly adopted another resolution: requesting TFG of Somalia to advise the Security Council of its readiness to conclude any necessary agreements to enable warships or military aircraft to escort ships employed by WFP for delivery of humanitarian aid to Somalia; called upon Governments in the region to conclude, in co-operation with IMO, and implement, regional agreement to prevent, deter and suppress acts of piracy and armed robbery against ships.

Regional agreement - Code of Conduct concerning the Repression of Piracy and Armed Robbery against Ships in the Western Indian Ocean and the Gulf of Aden - was formally adopted on 29 January 2009, at a high-level meeting convened in Djibouti. The signatories declare their intention to co-operate in the repression of piracy and armed robbery against ships; moving towards sharing and reporting relevant information through a system of national focal points and information centers.

Djibouti Code of Conduct

When the "Code of conduct concerning the repression of piracy and armed robbery against ships in the Western Indian Ocean and the Gulf of Aden" was adopted in Djibouti in January 2009, it brought together 21 regional States in a non-binding framework in which they agreed to cooperate to the fullest possible extent in the repression of piracy and armed robbery against ships. The Djibouti Code of conduct, as it is more commonly called, continues to offer these States the opportunity to work together towards a common aim: countering-piracy.

It is based upon 4 pillars: Info sharing; Update national legislation to include piracy, and which allows enforcement by suitable maritime forces; Regional training to establish common standards and build trust; and Capacity building, which is pulling the other 3 together and turning them into a national and regional operational capability to counter piracy.

The development of the Djibouti Code of conduct drew heavily on the developments made during Subregional meetings on maritime security including piracy





and armed robbery against ships held in Sana'a, Yemen in 2005 and Muscat, Oman in 2006 and noted that the General Assembly of the United Nations, at its 63rd session in 2008, had adopted resolution 63/111 which inter alia: 'recognizes the crucial role of international cooperation at the

global, regional, sub-regional and bilateral levels in combating in accordance with international law threats to maritime security, including piracy and armed robbery against ships, terrorist acts against shipping, offshore installations and other maritime interests'.

The international response to Somali piracy has been effective in mitigating the risk of hijackings at sea. The response has however, been largely driven and resourced from outside the region, and regional States and stakeholders are vulnerable to any reduction of the critical components of that response. International actors and regional States need to pursue in greater detail a strategy of transition from dependency on external assistance to a situation whereby ownership of critical components of the response reside within the region. But it is not simply a case of transferring all the components of the international response to the region but a progressive development of tactical and strategic capacities under regional ownership and management so that a sustainable coordinated response to all maritime security threats is created. Within the region this will not only require a shift towards regional ownership, but also a shift away from a military-centric counter-piracy solution to a joint and shared regional responsibility for maritime law enforcement including militaries, police , industry etc. in an anti-crime maritime security solution based upon the rule of law.

In many ways implementation of the Djibouti Code of conduct has been focused on the delivery of a number of parts of this solution but not all, and as the threat of Somali piracy recedes, it may be time to review whether the Djibouti Code of conduct continues to meet the region's needs, or whether it should revert to its origins and address other threats to maritime security beyond piracy.

Global crime

The value of effective maritime security in the region is not simply an issue for regional States. With major shipping lanes crossing the region there is an impact also on global trade, and this has been brought into sharp focus by the estimated costs of piracy. But with growing regional aspirations to develop and sustain its maritime economy (the blue economy), the threats from: illegal migration, counterfeit drugs, illegal narcotics, smuggling of weapons, terrorism, and illegal and unregulated fishing can no longer be overlooked. Add to this that the organized criminal gangs which benefited financially from piracy increasingly seem to be the same as those that make their money from other illegal activities in the region and it quickly becomes apparent that unless all aspects of maritime security are addressed, the region will never fully gain the benefits from the 'blue economy'.

Coordination of Maritime Security

The aim of the Djibouti Code of conduct was to repress piracy and armed robbery against ships, but the underlying themes were of regional cooperation and coordination, and agreement to co-operate both at sea and on land. In order to incorporate the key lessons from the successful containment campaign there is a need to transfer these lessons into a regional, rule-of-law orientated response. These lessons include inter alia:

- the value of closer cooperation between military and law-enforcement forces
- the fundamental importance of maritime domain awareness

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- the fundamental importance of open regional information sharing
- the importance of raising regional skill levels through regional training
- the underlying requirement for all operational strategies to be based in the rule of law
- the value of identifying all the stakeholders and ensuring all are engaged in the solution

Whilst in many ways these match the 4 pillars of the Djibouti Code of conduct implementation plan, it is of greater value to look at what overall regional capacity we are trying to enhance, and our aim should be to coordinate regional State authorities in the deterrence, detection, interdiction, investigation and prosecution of any unlawful acts within the region's maritime space. The Djibouti Code of conduct makes full provision in its existing detail to do all of these actions in the name of countering piracy but which could equally create a maritime security framework; to do so would require a fundamental decision by the region to shift its emphasis towards maritime security and incorporate it within the Code of conduct, as the West and Central African States have done already in their own Code of conduct. In terms of content, it requires a very small alteration to the wording of the Code of conduct agreed in January 2009.

Another lesson from implementation of the Code of conduct is that one solution does not fit all the region's needs. In many respects regional needs fall into three main geographical subregions based on existing common interests, many of which are based upon existing trading arrangements and threats to those interests. Thus there is a case should the region consider it pertinent, to review not only what the Code of conduct addresses, but also the relevance of how the sub-regions might implement the Code to suit their individual needs, with the Code of conduct acting as the overarching agreement within which the sub-regions cooperate and coordinate their work. Based on this thinking the three potential sub-regions could be:

- The Gulf of Aden and Red Sea
- East Africa
- The island States of the western Indian Ocean

Conclusion

If there is to be a shift from external assistance to regional ownership of the region's maritime space then a shift of emphasis is required. With piracy on the decrease in the region capacity building should become more focused on the protection of the region's maritime resources and the development of its blue economy through a cooperation framework. The Djibouti Code of conduct is an existing framework of 21 States which could, with minor adjustment, become the region's tool to work towards meeting all its maritime security

- The Djibouti Code 2013 Onwards Re-engage all Djibouti Code States at senior governmental level and ensure a multi-agency (whole of government) response to maritime security and countering piracy.
 - Enhance the role of MRCCs and existing regional structures in this process
- Create regional and sub-regional maritime security mechanisms to sustain the Code of Conduct beyond IMO's counter piracy project.

needs for the future, including the repression of piracy and armed robbery against ships.

There is potential for creating sub-regional coordination mechanisms within the overarching Djibouti Code of conduct to address maritime threats and solution to sub-regional trade and maritime resource management.

Field Study Tour

WMU SASAKAWA FELLOWS' NETWORK MEETING IN THE AFRICAN REGION



Variety of Pictures from Field Study Tour









Field Study Tour















Field Study Tour : Port of Tema

PORT OF TEMA

Tema Port, the larger of the two seaports in Ghana, is located 28km east of Accra the capital city of the country. It is situated on the Greenwich meridian and latitude 5.4 degrees north of the equator. The port spans an enclosed water area of 1.7million sq. meters and a total land area of 3.9million sq. meters. It comprises fourteen (14) berths in total with drafts ranging from 8.0-11.5 meters. The two (2) deepest berths of 11.5 meters draft each constitute our dedicated container terminal operated by the Meridian Port Services (MPS). The other berths include multipurpose berths, liquid and dry bulk berths, an oil jetty and a private berth operated by the Volta Aluminium Company.

The port was opened in 1962 and continues to upgrade its infrastructure and services. Services comprise vessel handling, stevedoring, shore handling - receipt, storage and delivery. Ancillary services include bunkering, waste reception, security and safety. With the increasing development and growth of the Ghanaian economy, cargo throughput is also experiencing positive growth in the various trade types. For example, from 2011 to 2012; Imports of plant and equipment increased by 79.9% while total dry and liquid bulk traffic increased by 19.3% and 22.4% respectively. Container traffic in TEU's increased by 9% from 756,899to 824,238 TEU's with total traffic increasing by 11.3%ie, from 10.7 to 11.6 million tons within the same period.

YEARS	VESSEL CALLS UNITS	TOTAL CARGO TRAFFIC	EXPORT	IMPORT	TRANSIT	CONTAINER TRAFFIC
		TEUS				
2005	1,643	9,249,977	1,182,469	6,936,688	875,325	392,761
2006	1,994	8,046,838	955,084	5,675,027	887,589	425,408
2007	1,672	8,378,682	1,099,094	6,120,583	843,656	489,147
2008	1,568	8,727,049	1,305,451	6,120,583	864,307	555,009
2009	1,634	7,406,490	981,075	5,694,280	509,124	525,694
2010	1,787	8,696,951	1,154,826	6,823,488	447,071	590,147
2011	1,667	10,748,943	1,532,139	8,431,531	614,078	756,899
2012	1,521	11,451,005	1,477,390	9,383,462	517,037	824,238

Port Performance

BUSINESS UNITS

Golden Jubilee Terminal

The Golden Jubilee Terminal (GJT) is an inland clearance depot (ICD) located on the western end of the Port of Tema. The facility covers an area of 97,412 square meters and comprises a container freight station (CFS), a state warehouse, a car park and an open area for



striping/un-stuffing and storage of containers, banking services and offices for customs. This facility is flanked by four other privately operated ICD's.



Fishing Harbor

Attached to Tema port is a Fishing port with draft up to 7 meters, capable of receiving trawlers and other vessels. The Tema Fishing Harbor is located on the eastern end of the main harbor. Icomprises an inner, outer harbor and a canoe basin. The inner fishing harbor begins with a 63 meter wide entrance. It has a total quay length of 467 meters which consists of a finger (60 meters) jetty; lay by jetty (155 meters) and a lay by wharf (100 meters) with draughts ranging between 3.5 and 4.0 metres. The outer fishing harbor also comprises a 122 meter entrance with 486 meters of quay length, with draughts ranging between 5.0 to 7.0 meters. The canoe basin is shielded by approximately 5.2 hectares of protected waters. It is equipped with a wooden jetty for motorboats, a fish preparation shed and a 120- room gear storage facility.

Ancillary services provided around the Fishing Harbor include a fish market, two fuel dispensing stations to cater for the fishers' outboard motors, several private cold store facilities, a private fish processing company and a bank.



Drydock

A dry-dock facility is available in Tema Port. The privately ran facility has a 100,000 dwt capacity with 20 and 60 ton mobile cranes. It is 277.4 meters long and 4.5 meters wide with an average draught of 8.2 meters depending on the tide. The facility provides dry-docking, ship repair, general engineering, metal locking and steel fabrication services.

Field Study Tour





The port's business units are also experiencing positive growth figures. Fishing harbor throughput increased by 18.3% from 128,258 in 2011 to 151,714 tons in 2012. While Golden Jubilee Terminal's unpacked vehicle receipts and deliveries increased respectively by 19%.

Transit Trade

The Port of Tema continues to ensure safe and fast cargo movement to and from Ghana and neighboring landlocked countries of Niger, Mali and Burkina Faso.

Outlook



Current Port Layout

Proposed Port Layout

The immediate outlook is to expand the capacity of the port through improved equipment position and automated operational and management processes. Hinterland accessibility is also being improved through the restructuring and expansion of the current road network and the establishment of efficient rail linkage between the port and the hinterland. Funding has been secured from the World Bank for the development of a transit truck park near the port. A modern training facility is to be developed to train the operational staff and employees of terminal operators in the port.

Processes have already begun for the expansion and modernization of the infrastructural facilities of the port. Facilities to be provided include:

- New Container Terminal
- New Food & Fruit Terminals
- New Ro-Ro Terminal

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- New Tran-shipment Terminals
- New Break/Dry/Liquid Bulk Terminals



The leading container hub and the beacon of trade and industry in West Africa

SASAKAWA VISIT TO THE PORT OF TEMA ON 9TH NOVEMBER 2013

On the 9th of November 2013, the Sasakawa African Network of fellows accompanied by their Japanese representatives from the Ocean Policy Research Foundation, paid a working visit to the port as part of the African Network Conference held in Ghana from 4th to 9th November, 2013.GPHA represented by the Marketing and Public Relations department received the delegation.

The Marketing and Public Relations Manager MPRM, Mr. Paul Ansah gave a presentation on the port's activities, current status, achievements, challenges as well as future plans.

Discussions following the presentation comprised the following:

Question & Response

Since there are so many stevedores, ICD'S and private operators how is the pricing regulated?

The GPHA tariff is the basis for pricing. All service providers price their services according to the GPHA approved tariffs.

How was the GC-Net system conceived?

The entire port community realized the need for it and consulted regularly on it with the Ghana Customs as the lead agency. It was eventually established as a PPP joint venture entity involving SGS and Ecobank with 65% shares and Ghana Customs, Ghana Shippers Authority and Ghana Commercial Bank as public sector partners having 35%.

What are the challenges with the GC Net single window system?

I. Occasional system failure some.

II. Some service providers are not fully integrated

What are the reasons for the high number of vessels at the port's anchorage is it related to waiting time?

• The anchorages of the ports of Ghana are the safest in the sub region due to consistent security and monitoring. Many ships bound for other ports seek refuge here while waiting for further instructions from principals. There is also an area demarcated for supervised ship-to-ship operations. So it is not related to high waiting times.

What are the reasons for the high turnaround time for some vessel categories?

• Bulk cargo vessels of large volumes obviously take longer to discharge

Field Study Tour



- Sometimes old vessels arrive with faulty gear
- Consignee delays in documentation.
- Berthing facilities are also limited

Comments

A lot of the privatization concessions related to ports on the western coastof Africa are granted to certain international monopolies in almost all the countries. This is detrimental to the region since it will stifle competition, result in price monopoly and is indirectly a form of the cartel system.

One of the fellows, Felicity Ankomah Sey had done a study on the effect of rail linkage from the port to the hinterland. She outlined the benefits in terms of savings in time and money. Transporters and haulage companies should be invited to contribute to the investment in rail rehabilitation.

The visit was crowned with a tour of the port which including the dedicated container terminal, the multipurpose terminal, scanning facilities and a view of the inland clearance depots.









SUMMARY OF PRESENTATION: 1. INTRODUCTORY REMARKS 2. RECENT DEVELOPMENTS / IMPACT ON PORT 3. EMERGING CHALLENGES 4. THE WAY FORWARD



Tema Port Vessel Traffic (Units) 2002-2012




Field Study Tour





/essel Type	Whole Port	Break Bulk		Cont Multi	Gen Cargo	Reefer Cont			Fish/ Meat	Other s
lo. of Call	1,521	213	511	33	87	104	162	128	136	8
Waiting Time	83.93	114.10	94.34	124.48	88.25	3.84	46.64	85.18	80.54	90.02
Port lavigation	0.94	1.07	0.97	0.96	0.93	0.83	1.07	0.84	0.81	0.69
Time @Berth	80.23	155.73	49.95	80.60	131.68	13.27	25.07	63.18	111.93	70.15
Time in Port	165.10	270.90	145.26	206.04	220.85	17.94	72.78	149.21	193.28	160.85



Brief History

The company began as Ghana Railway and Harbours Company in 1928 with only the Port of Takoradi.

The Port of Tema was built in 1962

In 1972, the company was divided into four separate public organisations:

Ghana Railway Company (GRC), Ghana Port Authority (GPA), Ghana Cargo Handling Company (GCHC) Takoradi Lighterages Company (TLC)

In 1986 GRC remained separated while the other three were merged into the Ghana Ports and Harbours Authority.



PORTOFTEMA Portoftema staff Strength: Benor + Management 209; Junior- 1,485 Senor + Management 209; Junior +

Port of Tema/Takoradi, Ghana

- Port of Cotonou, Benin
 Port of Conakry, Guinea
- Port of Abidjan, Cote d'Ivoire Port of Con Port of Dakar, Senegal Port of Lag
- Port of Dakar, Senegal Port of Lome, Togo
- Port of Lagos, Nigeria
 Port of Nouakchott, Mauritania
- ome, Togo



PORT AND MARITIME LOGISTICS MANAGEMENT REFORMS

In 2000 the GPHA began a programme to increase the participation of the private sector in the provision of services and facilities to ships and cargo in line with the government's strategic port development policy to transform the ports of Ghana from service ports to landlord ports

The Objectives were:

to make port operations more efficient and financially viable;

to improve the quality of services to customers;

to reduce the cost of doing business at the ports;

to encourage sustained growth in the ports industry;

to make Ghanaian ports more competitive in the sub-region;

to generate more private capital for re-tooling and modernization.

Activity 1: Container Terminal Concession

In 2004 the GPHA proposed and established Meridian Port Services Ltd. (MPS), a joint venture limited liability company with Meridian Port Holding Company (MPHC).

The MPHC is a consortium of two companies:







THE PORT PRIVATIZATION PROGRAMME (2001 - 2003)

- 1. Increased Private Sector Participation in Cargo Handling
- i. Licensing of 9 private stevedoring companies ii. 75% of stevedoring services transferred to the private companies
- iii. Bulk handling transferred to the private sector
- iv. 100% of shore handling transferred to the private sector
- v. Five inland container depots established in Tema
- 2. Privatization of Port Labour (Ghana Dock Labour Company)
- 3. Reduction of GPHA staff by 53%
- 4. Transfer of other non-core port services to the private sector
- 5. Concession of New Container Terminal



Activity 2: Single Window Concession

The GC-Net Joint Venture Partnership - October 2000

Public

- Ghana Customs 20%
- Ghana Shippers' Council 10%
- Ghana Commercial Bank 5%

Private

- Societe Generale de Surveillance 60%
- Ecobank Ghana Ltd 5% Public/Private Shareholding = 35/65% Total Cost - US \$12 million



Field Study Tour

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Sealing of General Cargo in Articulated Trucks Introduced to Secure Cargo in Transit





A.





- Impact of the EDI project
- 1. Simplified customs procedures
- 2. Faster clearance times
- 3. Quicker transit with GPS tracking system
- 4. Increased revenue collection
- 5. Improved competitiveness of general port and logistics services
- 6. The export competitiveness of the Ghanaian exports also increased due to:
- > the expeditious electronic processing of export consignments,

Activity 4

1.

- Upgrading of CCTV Security Systems at the Port. The entire Tema Port can now be easily monitored from the control room at the security department.
- 35 Cameras Controlled Port Electronically Ring-fenced



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EFFECTS OF REFORMS ON PORT OF TEMA







Activity 8: Access Road and Rail Rehabilitation





The rail transport system linking the Port of Tema to the center of Accra, the nation's capital was refurbished.

Access roads to and from the ports were also rehabilitated



Response:

- 1. Harmonization of Axle Load policy implementation in West Africa
- 2. Changing design specification of our corridor roads
- 3. Multimodal transport system rail transport expansion and modernization
- Total transit management reforms Implementation of Ghana Burkina/Mali Permanent Joint Commission for Cooperation (PJCC) recommendations.

Field Study Tour

Second Second<

1. The increase in the vessel time at berth at the MPS Terminal calls for a boost in equipment position

RESPONSE

- i. Two more gantry cranes and nine RTGs have been purchased by MPS to augment the fleet at the container terminal.
 - Equipment arrived in July 2013
- ii. Port purchasing four mobile container handling cranes
- iii. Purchased one tug boat and one security patrol boat in 2013

RESPONSE:

Expansion of Tema Port to meet National Traffic growth, Transhipment and Transit Trade demands

- >Dredging of basin and access channel: 16m draft
- >New Container Terminals
- >New Food & Fruit Terminals
- ≻New RoRo Terminal
- ≻New Tran-shipment Terminals
- ≻New Transit Terminal
- >New Break/Dry/Liquid Bulk Terminals











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- i. Commercial Loans
- iii. Public Private Partnership



Response:

- Develop Truck Park Outside the Immediate Port Area
- Remove Roundabouts Between Port and Motorway







Develop Alternate Routes to Tema Port



Response:

Development of rail connectivity to the hinterland with port facilities for rail transport of containers and general cargo.





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>Auto-Pick Truck Licence Plate into System

> Auto-Pick Container Nr into System & Identify damages

>Auto-Pick Driver and reject him if not registered.

Eight Optical Camera Recognition Systems to be installed at the main gates of the port to capture, store and distribute container and vehicle movement in and out of the port. Contract awarded and work has began.

Passenger Terminals Required





Thanks For

Your Kind Attention and Patience

Cruise Vessels need Own berths



Rig Repairs : Over 40 Rigs Now in West Coast

- Drilling Contractors must undertake long trips to Canary Islands or South Africa to repair their Rigs.
- Ghana is perfectly located in West Africa to cut such travel time.





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WMU & SAFE Joint Meeting

WMU SASAKAWA FELLOWS' NETWORK MEETING IN THE AFRICAN REGION

Program

Date : Thursday, 7 November, 2013

Time : 10:00 - 12:00

Venue : Sasakawa Center at University of Cape Coast

10:00-10:05	Opening Remarks by Dr. Deola Naibakelao, Managing Director, SAFE
10:05-10:15	Words from the Representatives of WMU & SAFE Alumni
10:15-10:35	Ceremony of the Presentation of Commemorative Gift, UCC to The Nippon Foundation
10:35-10:50	Greeting from Mr. Katsuhiro Motoyama of The Nippon Foundation
10:50-11:05	Presentation (WMU graduate 1) *including Q&A (15 minutes)
11:05-11:20	Presentation (WMU graduate 2) *including Q&A (15 minutes)
11:20-11:40	Presentation (SAFE graduate) *including Q&A (20 minutes)
11:40-11:45	Closing Remarks (Mr. Eisuke Kudo, Special Advisor, OPRF)
11:45-12:00	Group Photo Session

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Variety of Pictures from WMU & SAFE Joint Meeting













Field Study Tour













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Field Study Tour



Analysis of the legal aspect of maritime piracy and armed robbery against ships. The case of Madagascar

Jean Edmond RANDRIANANTENAINA, Madagascar

Abstract

The development of maritime piracy off the coast of Somalia has threatened the maritime activities in Madagascar and in the coastal States around the Eastern Africa and the Western Indian Ocean region. Additionally, the chance of the development of armed robbery against ships from the coast of Madagascar is not to be undermined due to the current vulnerability of its internal security following four years of political crisis. In this regards, Madagascar needs to strengthen its national legislation on maritime piracy and armed robbery against ships in order to put in place the foundation of the pillars for addressing the problem. In this perspective, the following paper proposes an analysis on how Madagascar can improve its national legislation to properly arrest, prosecute and convict pirates and armed robbers at sea. In doing so, the author identified firstly the parameters to be considered in a legislation on the matter based on the actual facts, looked at the international and regional legal references to which Madagascar can refer to in the second step of his analysis, and then assessed the existing Malagasy legislation before giving a proposal.

Keywords: Maritime piracy, armed robbery against ships, national legislation, judicial capacity.

1. Introduction

In his study on maritime piracy and maritime terrorism, Murphy identified seven factors favourising maritime piracy namely legal and jurisdictional opportunities, favourable geography, conflict and disorder, underfunded law enforcement, cultural acceptability, permissive political environment and reward¹. Surprisingly, the present context in Madagascar seems to fulfil the majority of these parameters except for conflict and disorder as well as cultural acceptability. Hence, in order to resolve the problem of maritime piracy and armed robbery against ships, there is a need to address all the aspects related to the above mentioned seven factors. In this regard, it appears that addressing the problem surrounding the legal and jurisdictional opportunities is at the basis of solving the issue. For this reason, as part of solutions for Madagascar to the problem of maritime piracy and armed robbery against ships, improving and strengthening its national legislation on the matter is of capital importance. In pursuing this route, three steps need to be followed namely the identification of the parameters to be considered in the legislation based on factual situations, the consideration of the existing international and regional legal references, and the evaluation of the existing Malagasy legislation in order to provide a proposal of improvement.

¹ Murphy, M.N, Small boats, Weak States, Dirty Money. Piracy and Maritime Terrorism in the Modern World, 2009, at p.4

2. The parameters to be considered in the legislation on maritime piracy and armed robbery against ships

2.1 The facts

Two types of threats have to be considered for Madagascar in terms of maritime piracy and armed robbery against ships: the Somali piracy and an eventual local maritime piracy and armed robbery against from the coast of Madagascar.

Since the beginning of maritime piracy phenomenon off the coast of Somalia, the maritime zones under the jurisdiction of Madagascar have been threatened by Somali piracy. Indeed, thanks to the use of mother ship system, the area of operation of Somali pirates has expanded off the coast of Madagascar since recent years. In December 2010 for instance, a pleasure craft flying the flag of Madagascar known as the "Felicity" was attacked by Somali pirates just 20 nautical miles off the north-western coast of Madagascar and used as a mother ship to hijack ships passing through the Mozambique Channel. In February 2011, a skiff², with Somali pirates and crew members of a hijacked vessel known as "Zoulficar" left adrift 60 nautical miles off the north-eastern part of Madagascar, arrived in the port of Antsiranana to seek replenishment. The "M/V Zoulficar", a Comoros flagged vessel, was hijacked as well as was used also as a mother ship for almost three months. The Zoulficar case resulted in the arrest of 12 Somali pirates by the Malagasy Navy. Among the arrested pirates, one was 16 years old. These two cases testify that Somali piracy is a real threat to Madagascar. If we look closely to the Somali piracy, it consists of hiring unemployed youth, employing poor fishermen to provide boats and navigational skills, paying foreign businessmen to provide weaponry, communication means and vehicles, eventually hijacking a medium size vessel to be used as mother ship to expand operation zone, and then seize a higher value vessel, look after hostages and collect a ransom.

From the coast of Madagascar, there is also a possible development of the maritime piracy and armed robbery against ships due to the problem related to the internal security within the country following the political crisis of 2009 and which persists up to present day. Indeed, the occurrence on land of criminal acts that could form the ingredients of maritime piracy against ships (such as kidnapping for ransom, armed robbery in various forms, etc.) and the fragility of the economical, the social and the political environment coupled with lack of resources to ensure a proper maritime surveillance may also lead to the creation of opportunities for a thriving armed robbery against ships off the coast of Madagascar if not prevented.

Based on the International Maritime Organization (IMO) and International Maritime Bureau (IMB) reports, between 1992 and 2012, there were 10 reported cases of maritime piracy and armed robbery against ships off the coast of Madagascar. They were perpetrated in ports, at anchorage, in the territorial sea and in the EEZ of Madagascar. Although the number of reported cases seems to be more or less low, there is no certainty that other cases would have occurred but went unreported.

In summary, the manifestation of maritime piracy and armed robbery against ships off coast of Madagascar is characterized by the following:

- Type of acts: Hostage taking and asking for ransom, mistreatment of people on board the vessel, stealing personal belongings or equipment on board, cargo theft, vessel theft, etc.

² A skiff is a small fibreglass made boat usually powered by very powerful engines used by Somali pirates to conduct an attack

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- Location of the incident: High seas, EEZ, Territorial Sea, Internal Waters.
- Type of perpetrators: national or foreign adults and minors.
- Specificity of the crime in some cases: transnationality and financial flow.
- Difficulty during the apprehension of the crime perpetrators due to insufficient operational means and confusion on the rights and obligations of the authority authorized to arrest.
- Difficulty during the judicial process like during the "M/V Zoulficar" case.

2.2 The parameters to be considered in an anti-piracy legislation:

From the above mentioned facts, it can be concluded that the following parameters need to be highlighted in an anti-piracy legislation:

- The definition of the offense: It is the description of the nature of the committed acts and the various parameters to be taken in consideration to constitute the crime. Since there are a certain number of criminal acts that could occur during a piracy or armed robbery at sea attack, it is important that the definition covers the various possible scenarios. In addition, because of the fact that the location of incident can be in any of the maritime zones as defined in the UNCLOS, the definition should consider any piracy and armed robbery against ships incident happening in any of those maritime zones.
- The criminalization of the offense : It is to make the offense illegal as an event is only a crime when it is defined as such by law³. It enables to bring charges against a potential offender and to provide the appropriate penalty.
- The condition under which the perpetrators are apprehended : It is important to designate the authority authorized to arrest, to define its rights and obligations, and to clarify the enforcement measures.
- The jurisdiction : It expresses the power and the authority to decide a particular case⁴ and to bring a person before the justice and to judge his or her rights⁵. In other words, there is a need to precise the competent court.
- The judicial process and human rights issues: The judicial process is related to court's procedures including the investigation, the prosecution, the trial and the conviction. It is often attached to the human rights issues which need to be addressed in context of maritime piracy and armed robbery against ships' repression as conformity to the international human rights laws are recommended or even set as a mandatory requirement given the quasi universal recognition of the protection of human rights.
- International co-operation: Given the possible involvement of several nationalities in a maritime piracy and armed robbery at sea case as well as the transnationality of the crime eventually, international co-operation is vital in various domains. Hence, it is important that the legislation contains provisions on international co-operation.
- Conformity to the relevant international instruments and the internal law requirements: It has been recommended that anti-piracy legislation should be established in line with

³ United Nations Office on Drugs and Crime, Principles and framework for an international classification of crimes for statistical purposes, Report of the UNODC/UNECE task force on crime classification to the conference of European statisticians, June 2012, at p.7

 $^{4 \}qquad {\rm Subject\ matter\ jurisdiction}$

⁵ In personam jurisdiction

international law including international human rights law⁶. Indeed, if a country is party to any international treaty pertaining to maritime piracy and armed robbery against ships, it has the obligation to implement them. However, it is also crucial to be in line with the existing national legal system requirements while implementing the international conventions. In the context of maritime piracy and armed robbery against ships for instance, there is a need to conciliate the implementation of the provisions on the matter provided in international conventions such as UNCLOS or SUA to those contained in national criminal legislation (Criminal code, Criminal Procedure Code).

- Regional harmonization: The manifestation of maritime piracy and armed robbery against ships is somehow similar within the affected region. For this reason, it is important to consider neighbouring countries legislation on the issue while elaborating your own country national legislation. Indeed, regional harmonization of the legislation is essential as if the perpetrators of the crime are not arrest within the maritime zones under the jurisdiction of a coastal State and move in another, it will be ensured that they will be prosecuted similarly and will receive almost the same penalty wherever they are arrested off the coast of any coastal States within the region.

3. The international and regional legal references

Having identified the various parameters that are needed to be considered in an anti-piracy legislation, it is important in the next stage to look at international conventions and neighboring countries legislation pertaining to maritime piracy and armed robbery against ships highlighting the identified key legal elements.

3.1 The international legal references:

In terms of international instruments, the following international conventions and resolutions contain provisions related to or which can be used to the context of maritime piracy and armed robbery against ships:

- The High Seas Convention (Art.14 to 23)
- The United Nations Convention on the Law of the Sea or UNCLOS (Art.100 to 107, 110 and 111);
- The International Convention for the Suppression of Unlawful Acts (SUA);
- The United Nations Convention against Transnational Organized Crime (OCC);
- The International Convention against Hostage Taking (HC);
- The international instruments related to human rights: The Universal Declaration of Human Rights (UDHR), the International Covenant on Civil and Political Rights (ICCPR), the Convention on the Rights of the Child (CRC), the Convention Related to the Status of Refugees (CRSR);
- The United Nations General Assembly and Security Council Resolutions;
- The IMO General Assembly Resolutions.

The UNCLOS proposes a definition of maritime piracy based on criteria related to the geographical location of the commission the act (on the high seas or in the EEZ), the private ends requirement (economic and personal gain), the two ship rule (presence of a pirate ship

⁶ United Nations Security Resolution S/RES/2015 (2011), paragraph 9

and a victim ship) and the considered type of acts (illegal acts of violence or detention, or acts of depredation)⁷. To complement the UNCLOS definition, the notion of "armed robbery against ships" has been introduced to cover acts that are similar to maritime piracy but committed in the territorial sea, or in the archipelagic waters, or in the internal waters⁸. However, maritime piracy and armed robbery against ships when considering its manifestation can also be treated under SUA Convention as unlawful acts against the safety of navigation⁹, or under the United Nations Convention against Transnational Organized Crime known as the Organized Crime Convention (OCC) as an organized crime¹⁰, or within the framework of the International Convention against the Taking of Hostages (HC) as a hostage taking¹¹ in case of kidnap for ransom piratical act.

In terms of criminalization, although the UNCLOS does not include explicit provision on criminalization of maritime piracy, the fact of allowing States to arrest persons involved in maritime piracy and to decide upon the sanctions to be applied, implies that it should be done under the domestic legislation and it would cover the commission of the act, participation, incitement and facilitation¹². The SUA convention, the OCC and the HC compel States Parties to consider as offenses the attempt, commission of the act, support and facilitation¹³.

On the jurisdiction issue, the UNCLOS proposes the choice for States parties to exercise or not universal jurisdiction over maritime piracy regardless of the nationality of the perpetrator(s), pirate ship(s)/aircraft, victim(s) or victim ship(s)/aircraft¹⁴ whereas armed robbery at sea remains under coastal State jurisdiction¹⁵. The SUA convention, the OCC and the HC oblige the States Parties to assert jurisdiction and proposes a more restrictive stand where a jurisdictional nexus related to the nationality of the perpetrator(s), or the victim(s), or the flag of the ship involved, and territorial link, are required. They compel also the States parties to prosecute (to assert jurisdiction) or to extradite (to transfer the jurisdiction) the perpetrator(s)¹⁶.

As far as the condition under which the perpetrators are apprehended, the UNCLOS provides a certain number of enforcement measures such as the arrest of suspected offender, the seizure of pirate ship(s)/aircraft(s) and the property onboard, the prosecution and the trial in national courts¹⁷, the designation of competent authority to conduct the arrest and seizure as warships, or military aircraft, or other government ships and aircraft clearly marked and authorized to that effect¹⁸ for maritime piracy cases. It provides also enforcement rights such as

⁷ UNCLOS, article 101 read in conjunction with article 58(2)

⁸ International Maritime Organisation Resolution A.1025(26), paragraph 2.2. The term <armed robbery against ships> is used along with "maritime piracy "or "piracy" in various international instruments such as the United Nations General Assembly and Security Council Resolutions, the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (RECAAP) and the Code of Conduct concerning the Repression of Piracy and Armed Robbery against Ships in the Western Indian Ocean, the Gulf of Aden and the Red Sea Areas.

⁹ SUA Convention, article 3, para.1(a), 1(b), 1(c) & 1(g), para 2

¹⁰ OCC, article 2(a)

¹¹ HC, article 1

¹² UNCLOS, article 101 & 105

¹³ SUA Convention, article 5 ; OCC, articles 5, 6, 8, 23 ; HC, article 2.

¹⁴ UNCLOS, article 105

¹⁵ Ibid., article 2; article 19 paragraph 1 & 2(1), article 21(a), article 27

¹⁶ SUA Convention, article 6(1) & (2); OCC, article 15(1) & (2); HC, article 5(1)

¹⁷ UNCLOS, article 105

¹⁸ Ibid., article 107

the right of visit¹⁹ and the right of hot pursuit²⁰ but moreover enforcement safeguards such as liability for arrest or seizure without adequate grounds²¹. In the same premise of enforcement measures, the SUA convention provides for the master delivery of suspected offender to State party authorities²². The same convention, the OCC and the HC oblige the States parties to arrest suspected offender(s), to prosecute or extradite such person(s)²³. The OCC provides also for the seizure of property, equipments or means used for the commission of the act and the proceeds of crime²⁴.

During the judicial process, the Universal Declaration of Human Rights (UDHR), the International Covenant on Civil and Political Rights (ICCPR), the Convention on the Rights of the Child (CRC) and the Convention Relating to the Status of the Refugee (CRSR) incorporate the human rights requirements that should be considered. They include the necessity to ensure equality of dignity and rights, and equal justice²⁵. During the arrest phase, the exemption to arbitrary arrest and detention needs to be guaranteed²⁶. For the period of the investigation, the prosecution, and trial stage, the presumption of innocence and fair public hearing should be ensured²⁷. Upon conviction and with respect to the incarceration, respect of dignity and humanity, segregation of accused and convicted persons are to be considered²⁸. For the minors involved in crime like maritime piracy and armed robbery against ships, special treatment and consideration should be arranged during the investigation, the prosecution, the trial and the incarceration²⁹. Based on the provisions related to the protection of the child, criminalization of acts related to the recruitment of children into maritime piracy and armed robbery against ships can be envisaged³⁰. As far as asylum issues are concerned, it is recognized that for serious non-political crime, asylum request can be denied³¹.

The international cooperation is vital given the often international and transnational nature of most of maritime piracy and armed robbery at sea cases. Indeed, the General Assembly and the Security Council of the United Nations in their respective resolutions emphasized on the need for international cooperation. The international treaties pertaining to maritime piracy and armed robbery against ships (UNCLOS, SUA, OCC, and HC) provide also for provisions on international cooperation and in some cases precise the various domains where bilateral or multilateral cooperation is suggested to be developed such as law enforcement cooperation, extradition, transfer or delivery of suspected offender, joint investigation, etc³².

29 Ibid., article 10; CRC, article 40)

¹⁹ Ibid., article 110

²⁰ Ibid., article 111

²¹ Ibid. article 106, article 110(2) & (3)

²² SUA Convention, article 8

²³ Ibid., article 6(1) & (2), article 7; OCC, article 15(1) & (2); HC, article 5(1)

²⁴ OCC, article 12 & 14

²⁵ UDHR,, article 1 & 7

²⁶ UDHR, article 9 & 10; ICCPR, article 9

²⁷ ICCPR, article 14

²⁸ Ibid., article 10

³⁰ CRC, article 32(1) & article 36

³¹ UDHR, article 14; CRSR, article 1F(b) & article 33(2)

³² UNCLOS, article 100; SUA Convention, articles 8, 11, 12, 13, 14; OCC, articles 13, 14(2), 16, 17, 18, 19, 27, 28; HC, articles 10(1), 11(1)

It is important to highlight that Madagascar is party to all of the above mentioned international Conventions as summarized in the table below. Hence, as a State party, it has the obligation to implement them in its respective national legislations.

CONVENTIONS	ENTRY INTO FORCE	MADAGASCAR'S RATIFICATION OR ACCESSION		
The 1958 Convention on High Seas (CHS)	30 September 1962	31 July 1962 (r)		
The 1951 Convention Relating to the Status of Refugee (CRSR)	22 April 1954	18 December 1967(a)		
International Covenant on Civil and Political Rights (ICCPR)	23 March 1976	21 June 1971(r)		
Convention on the Rights of the Child (CRC)	02 September 1990	19 March 1991 (r)		
The 1982 Law of the Sea Convention & Agreement on the implementation of Part XI (LOSC)	16 November 1994	28 September 2001 (r)		
The 1979 International Convention against the Taking of Hostages (HC)	3 June 1983	24 September 2003 (a)		
United Nations Convention against transnational Organized Crime Convention (OCC)	29 September 2003	15 September 2005 (r)		
The 1988 International Convention for the Suppression of Unlawful Acts of Violence Against the Safety of Maritime Navigation (SUA Convention)	01 March 1992	15 September 2006 (a)		

Table 1 International Conventions related to maritime piracy and armed robbery against ships to which Madagascar is party

3.2 Madagascar neighbouring countries models of legislation:

As mentioned previously, regional harmonization of legislation is fundamental in addressing maritime piracy and armed robbery against ships. Hence, while elaborating or improving a national legislation, it is necessary to look at neighbouring countries legislation on the issue in order to inspire from the model of provisions but moreover to consider harmonization. In this respect, maritime piracy and armed robbery against ships' legislations of La Reunion (France), Mauritius, Seychelles, Kenya and Tanzania can be taken as models for Madagascar and they deserve particular analysis.

From the examination of the above mentioned countries' legislation, it is noticed that the main features of legislation models in the region are characterized by the following:

- The use of the UNCLOS, IMO Resolution A.1025 (26) and the SUA Convention as main international legal references;
- Adaptation of the definition to the practical context by rectifying the deficiencies embedded in the UNCLOS definition through the consideration of the IMO Resolution A.1025 (26) notion of armed robbery against ships and the SUA definition;
- A certain number of maritime piracy and armed robbery at sea related acts are criminalized namely attempt, commission, incitement or facilitation to commit and it appears that a

Field Study Tour



deterrent penalty is allocated;

- Designation of the competent court and extension of its jurisdiction to piracy and armed robbery at sea acts committed in high seas, EEZ, and internal waters;
- Designation of the competent authorities for the arrest of the perpetrators and the seizure of the pirate ship, and indication of their rights and duties during the arrest process;
- Adaptation of the judicial process to the context of maritime piracy and armed robbery against ships taking into account the human rights dimension and the evidence management;
- Introduction in the legislation provisions related to the international cooperation particularly in the field of suspected pirates transfer.

In summary, there are a certain number of international instruments related to maritime piracy and armed robbery against ships which can be implemented on national level while drafting a national legislation on the matter. Madagascar is party to the majority to the majority of the international conventions related to the issue. Additionally, its neighbouring countries legislations on the matter can be used as models and regional references to ensure harmonization with the countries in the region.

4. Evaluation of the Malagasy legislation

4.1 The Malagasy legislation on maritime piracy and armed robbery against ships: Identifying deficiencies

Madagascar has a civil law system. Its national law on maritime piracy and armed robbery against ships is based mainly on provisions on the issue embedded in the Malagasy Maritime Code of 2000, the Criminal Code as a complementary legal reference and the Criminal Procedure Code for the judicial process. There are other legal instruments that deal with the treatment of juvenile involved in criminal case and related to the case of proceeds of crime gained from transnational organized crime activities from which reference can be made and adapted in the context of maritime piracy and armed robbery against ships.

- A restricted definition of the offenses:

The article 1.5.01 of the Maritime Code of 2000 gives the definition of maritime piracy and reproduces almost verbatim the definition provided in article 101 of the UNCLOS. As such, only piracy acts committed on the high seas and in a place outside the jurisdiction of any State are considered. There is no precision or definition provided regarding acts that are similar to piracy happening in the EEZ. Despite the fact that maritime piracy is also considered in the EEZ based on the interpretation of the article 58(2) of the UNCLOS, it should be literally specified in the national legislation in order for the interpretation to be fully implemented. The fact of not specifying piracy as an act that can be also committed in the EEZ within the national legislation leaves a legal uncertainty or a gap in treating by the national courts an act that occurs in that particular maritime zone. As a concrete example, the M/V Zoulficar was arrested 60 nautical miles from Madagascar coast. As such, it was arrested in the EEZ not on the high seas which is defined as the sea not forming part of the internal waters, the territorial sea and the EEZ according to the Maritime Code of 2000³³. Hence, in referring to the maritime piracy definition stated in the Maritime Code of 2000,

³³ Maritime Code of 2000, article 1.2.04

the M/V Zoulficar case is not a piracy case because nowhere in the definition, the term EEZ is mentioned. Similarly, acts, which resemble to maritime piracy perpetrated in internal waters and territorial sea, are not considered. The fact of not considering such acts in the national legislation under one denomination leaves a big gap as such offenses would be treated under multiple criminal offenses as provided in the Criminal Code.

The required presence of a victim ship/aircraft and a pirate ship/aircraft leaves out also the case where the perpetrator(s) sneaked on board in port and decide to act from the inside only when the vessel is on the high seas or in the EEZ.

Hence, the definition of the offense provided in the Maritime Code of 2000 contains deficiencies in the sense that piratical acts committed in the EEZ is not expressly stated, acts that are similar to piracy perpetrated in the internal waters and in the territorial sea known as "armed robbery against ships" are not considered, and seizure and control perpetrated by people from the inside the same ship is not taken into account.

- The criminalization does not cover the full aspect of maritime piracy and armed robbery against ships:

The Maritime Code of 2000 criminalizes the following offenses related to maritime piracy and establishes the respective penalty:

- o A ship without nationality is considered as a pirate ship and its crew as pirates:
 - Article 7.13.01 of the Maritime Code provides that a ship navigating without the necessary document that proves its nationality and the legitimacy of its expedition (A ship without nationality) is considered as a pirate ship and its crew as pirates. The officers on-board such ship are liable for a lifetime forced labor whereas the ratings are liable for limited time forced labor³⁴. In this case, the basis of considering the offense is only the absence of nationality not the fact that the ship itself has been used by the crew in a piracy attack. Indeed, the fact of not having a nationality is an indication of suspicion but it seems not to be enough to prove that the ship is a pirate ship and the crewmembers are pirates unless other additional elements that are found on-board (Weaponry, small boats, Jerry can, ladder, hostage, etc.) or the ship's activity prior the boarding (Attacking another ship, preparing an attack, etc.) shows that there was actually intent or actually a commitment to piracy. Moreover, in its comments on the article of the Law of Sea related to the definition of a pirate ship or aircraft, the International Law Commission stated that the simple fact that a ship sails without a flag is not satisfactory to consider it as a pirate ship³⁵. Consequently, this provision of the Maritime Code of 2000 criminalizing a ship without nationality on the high seas as a pirate ship represents a deficiency and should be revised or omitted.
- A ship captain holding several commissions issued by various flag States is also considered as a pirate pursuant to article 7.13.02 of the Maritime Code of 2000 and he is liable for lifetime forced labor. In the same way as explained previously, the mere fact that a ship

³⁴ Maritime Code of 2000, article 7.13.01

³⁵ United Nations, Yearbook of the International Law Commission 1956, Volume II, Documents of the 8th Session including the report of the Commission to the General Assembly, 1957, New York: United Nations, article 41 commentary, at p. 283

captain holds suspicious documents regarding his position and his title on-board is not sufficient to consider him as a pirate unless other substantial evidence demonstrates that he uses the ship as well as its crew into piracy activity. Thus, this provision needs also a revision or should be omitted from the Maritime Code criminalization provision on maritime piracy.

- o Committing a hostile act under a forged flag exposes the ship captain and the officers to lifetime forced labor pursuant to article 7.13.04 of the Maritime Code. Here, the hostile act is not clarified even though the provision is treated under the chapeau of maritime piracy. In fact, a hostile act may cover a range of possibilities such as attacking a ship in order to destroy it or to commit other maritime terrorism act which is outside the scope of maritime piracy. Hence, hostile act is not only piracy.
- o When committed with depredation or violence, by Malagasy nationals or foreigners and against a Malagasy flagged ship or against a ship flying the flag of a foreign State with which Madagascar is not at war, the offenders will be charged as pirates. Whether the depredation or violence was committed without homicide or physical harm, the penalty is limited time forced labor but if it was committed followed by such acts, the perpetrators are liable for a lifetime forced labor³⁶. This provision seems to consider some of the key elements of the definition of maritime piracy related to the type of acts that needs to be criminalized. Indeed, here illegal depredation and illegal violence are set as offenses and correspondent penalties are given. However, illegal detention is not covered and leaves a gap on this criminalization provision.
- o Any Malagasy nationals who are crew members of a ship and acting with violence toward the captain in order to take control of the ship are liable for lifetime forced labor³⁷. In this case, the purpose of taking control is also not clarified whether the ship will be used to commit piracy or to be utilized for other purpose. First of all, the fact that a ship is taken in control by the crew does not mean that it becomes a pirate ship right away unless it is used or intended to be used to commit piracy. Secondly, in referring to the definition of piracy that has been used (A replicate of the UNCLOS, article 101), an act perpetrated from the inside of the same ship is not considered as piracy. Consequently, this criminalization provision calls also for a revision.
- Finally, any Malagasy nationals who are crew members of a ship and who handed over the ship to pirates are liable for lifetime forced labor³⁸. In this case, the underlying concept of a pirate ship and a pirate seems to be considered. Indeed, by handing over a ship to pirates, the crew fulfills the condition of voluntary participation in the operation and being placed under the control of pirates, the ship becomes a pirate ship. However, it is important to note that nowhere in the criminalization provisions in the Maritime Code of 2000, attempt, or facilitation, or incitement to the commission of maritime piracy is considered as an offense. Nevertheless, the Criminal Code provides that those who are inciting and facilitating a felony are considered as accomplices and receive the same

³⁶ Maritime Code of 2000, article 7.13.03

³⁷ Ibid., article 7.13.06

³⁸ Maritime Code of 2000, article 7.13.07

penalty as the perpetrators³⁹. Thus, it would be under these provisions of the Criminal Code that the attempt, incitement and facilitation of maritime piracy can be criminalized.

Since armed robbery against ships is not considered in the current legislation, such acts would be treated under the Criminal Code with regards to criminalization. Hence, in case of a similar act as maritime piracy but committed in the internal waters or the territorial sea (armed robbery against ships), it would be treated under the Criminal Code by referring to several offenses such as theft⁴⁰, assaults⁴¹, kidnapping⁴², murder⁴³, attempt to murder⁴⁴, attempt to rape⁴⁵, etc., depending on the acts committed and the circumstances during the commission of the offense. The Criminal Code offenses constitute also aggravating circumstances if committed along with maritime piracy and they would be included in the charge in addition to the offense of maritime piracy. This was the case during the M/V Zoulficar case where the 12 Somali pirates were charged with piracy but also kidnapping, assault and attempted rape as additional charge.

Overall, the criminalization provisions of the Maritime code of 2000 on maritime piracy present several anomalies that need to be corrected and revised. It appears that situations which do not constitute a complete evidence of a maritime piracy act are considered as piracy. Additionally, not all the types of acts stated in the definition are criminalized under the criminalization provision. Indeed, illegal detention, attempt, facilitation, and incitement to the commission of maritime piracy are not considered and armed robbery against ships type of acts are treated under the Criminal Code offenses.

- Jurisdiction:

Pursuant to article 1.5.05 which is a replicate of the article 105 of the UNCLOS, the jurisdiction of Madagascar over maritime piracy extends to the high seas or in a place outside the jurisdiction of any State. In this regard, when Madagascar is the arresting State, it may assert jurisdiction without distinction of nationality of the suspected offenders, the pirate ships/aircrafts, the victims, and the victim ships/aircrafts. The second paragraph of the article 1.5.05 states that "the competent courts may decide upon the penalties to be imposed, and may also determine the action to be taken with regards to the ships, aircraft or property, subject to the rights of third parties acting in good faith" without specifying which courts are the competent courts that are able to hear and determine a maritime piracy case especially concerning a foreign flag vessel. For vessel flying the flag of Madagascar, the Maritime Code of 2000 indicates that felonies or misdemeanors, committed on-board such vessel, fall under Madagascar penal jurisdiction⁴⁶. The examination of the Criminal Code classifies the offense into three categories namely felony, misdemeanor and

³⁹ Criminal Code, article 60

⁴⁰ Ibid., article 379 and following

⁴¹ $\,$ Ibid., article 309 & 310 and following

⁴² Ibid., article 341 & 342 and following

⁴³ Ibid., article 295 & 296 and following

⁴⁴ $\,$ Ibid., article 295 & 296 read in conjunction with article 2 $\,$

⁴⁵ Ibid., article 332 read in conjunction with article 2

⁴⁶ Maritime Code of 2000, article 7.3.01

petty offense⁴⁷. The classification depends on the penalty applicable to the perpetrator on the basis of the committed offense. It is classified as a felony, an offense that is penalized by death penalty, lifetime and limited time forced labor⁴⁸, deportation⁴⁹, detention⁵⁰, reclusion⁵¹ and the degradation of civil rights⁵². Misdemeanor⁵³ concerns the offense that has a penalty of limited time imprisonment in a regular prison, or limited time interdiction of political, civil and family rights, or a fine whereas petty offense⁵⁴ has a penalty of very limited time imprisonment, or a fine, or the confiscation of seized object. In case of a felony, the competent court is the Criminal Court⁵⁵ which is generally affiliated to the Court of Appeal or created within the First Instance Court when there is no Court of Appeal in the region. Being an offense penalized by a lifetime or limited time of forced labor, maritime piracy is then a felony and consequently the Criminal Court is competent court to hear any case. However, despite the fact that Madagascar can extend its jurisdiction over piracy on the high seas according to the Maritime Code of 2000, the Criminal Procedure Code was not amended in this regards and still provides only for a territorial competence (Land competence) of the Criminal Court located in the place where the criminal offense was committed or where the suspected offender's arrest was performed or the one situated in the place of residence of this latter⁵⁶. There is no mention of any extension of the court competence in the territorial waters, the EEZ or the high seas. This appears to constitute a major deficiency in terms of jurisdiction if one considers the issue in a strict manner, although in practice, like in Zoulficar case, the Criminal Courts often assert jurisdiction over maritime criminal case. As previously explained, the Maritime Code of 2000 does not define acts that are similar to piracy but are perpetrated in the territorial sea, or in the internal waters and remains silent. Nevertheless, it states that Madagascar can exercise its penal jurisdiction over a foreign ship in the territorial sea in case where the consequences of any committed offense extends to the territory of Madagascar, or the offense itself disturbs the peace of the country or the order in the territorial sea, or the assistance of the Malagasy authorities has been required either by the captain or a diplomatic representative of the flag State, or such measures are necessary in the repression of illicit traffic in narcotic drugs or psychotropic substances⁵⁷. Additionally, it is stated that in the internal waters, Madagascar has the right to exercise all the prerogatives pertaining to the enforcement of its national law⁵⁸. Consequently, any act similar to piracy

56 Ibid., article 34

58 Ibid., article 1.7.03

⁴⁷ Criminal Code, article 2

⁴⁸ Limited time forced labor penalty is pronounced for at least 5 years and for a maximum of 20 years. Criminal Code, article 19

⁴⁹ Deportation consists of moving the convicted person to a place determined by the law where he will stay for the rest of his or her life.

⁵⁰ A detention is an imprisonment in a high security prison for not less than 5 years and for not more than 25 years. Criminal Code, article 20.

⁵¹ A reclusion is an imprisonment in a medium security prison for not less than 5 years and for a maximum of 10 years. Criminal Code, article 21.

⁵² The degradation of civil rights consists of discharge from public position, privation of civil and political rights, interdiction of the right to detain a weapon, interdiction to part of a jury and to be part of the armed forces. It is often pronounced with an imprisonment penalty less than 5 years.

⁵³ In a misdemean our case, imprisonment is pronounced between 1 month to 10 years, or a fine superior to 100.000 MGA

⁵⁴ In a petty offense case, imprisonment is pronounced between 1 to 29 days or a fine between 400 MGA and 100.000 MGA

⁵⁵ Criminal Procedure Code, article 18

⁵⁷ Maritime Code of 2000, article 1.7.02



committed in the territorial sea, if proved to fulfill one of the above mentioned conditions, or perpetrated in internal waters, would be treated under the penal jurisdiction in Madagascar.
Enforcement measures, competent authorities, their rights and obligations :

The enforcement measures are similar to those given in the UNCLOS. Madagascar may (1) seize a pirate ship or aircraft, or a ship or aircraft engaged in maritime piracy and under the control of pirates; (2) arrest the persons on board; and (3) seize the property on board⁵⁹. The Malagasy competent courts may decide upon the penalties to be imposed, and may also determine the action to be taken with regard to the ships, aircraft or property, subject to the rights of third parties acting in good faith⁶⁰. Warships, or military aircraft, or other ships or aircraft clearly marked and identifiable as being in government service and authorized to that effect are the competent authorities entitled to seize on account of piracy⁶¹. The use of the term "warships" would refer to the Malagasy Navy and military aircraft would suggest that the Malagasy Air Force would be also competent since it is the only agency having military aircraft in Madagascar. There are other government ships such as those belonging to the Fisheries Surveillance Centre or the National Gendarmerie but despite the fact that they are clearly marked and identifiable, their mandate does not include a piracy mandate. The rights and duties of the enforcement authorities include the right of visit on the high seas⁶² and the right of hot pursuit beyond the contiguous zone⁶³. When exercising its right of visit, the warship can proceed to the verification of the document related to the right of the ship to fly its flag and if suspicion remains, a further examination can be conducted but such right should be performed with adequate grounds⁶⁴. However, the right to take coercive measures and the right to divert to an appropriate port or position for further examination are not mentioned. For penal offense on-board a Malagasy flagged ship in any maritime zones by referring to article 7.3.02 of the Maritime Code of 2000, Navy Officers and Petty Officers acting as commanding officer of a Malagasy Navy ship are authorized to conduct any inquiry and to ascertain the commission of such offense on-board. With regards to the arrest of suspected offenders and their detention at sea, two issues need to be highlighted as they appear to be missing in the current legislation namely (1) the right to arrest and to detain a person which is a prerogative attributed only to law enforcement officers or judicial police officers not to the military i.e. the Navy or Air Force and (2) the procedure related to the detention at sea and its duration which has to be in conformity to the Criminal Procedure Code.

With regards to tracing and confiscating proceeds of crime, the Act n°2004-020 of August 19, 2004 related to money laundering, tracing, confiscating and international cooperation on proceeds of crime indicates that any persons, because of their profession, execute, control, or give advice in operations involving in movements of capitals, banks, public and private financiers, postal services, insurance companies, mutual companies,

⁵⁹ Maritime Code, article 1.5.05

⁶⁰ Id.

⁶¹ Ibid., article 1.5.06

⁶² Ibid., article 1.4.05

⁶³ Ibid., article 1.4.04

⁶⁴ Ibid., article 1.4.05



stock exchanges and foreign currency exchanges companies owners are compelled to inform the financial intelligence services if there is a suspicion that such capitals originated from transnational organized crime⁶⁵. Hence, the current national legislation provides already legal means to trace and confiscate proceeds of crime such as ransom in the context of maritime piracy and armed robbery against ships and to criminalize money laundering of such proceeds of crime⁶⁶.

- The judicial process and human rights issues:

The Criminal Procedure Code provides the description of the judicial process that has to be followed for treatment of any penal offense from the arrest of the suspected offender up to the trial. In addition, it gives the information regarding the competent court and competent judicial authorities that are involved in the criminal proceedings. As indicated earlier, the Criminal Court is the competent court that can hear and determine maritime piracy and armed robbery at sea cases as they are classified as felonies. As such, the judicial process requires the intervention of the judicial police officers during the investigation phase, the public prosecutor, the instructional judge, the general prosecutor and the accusation chamber for the prosecution stage and the trial to be held at the Criminal Court which is generally affiliated to the Court of Appeal or created within the first instance court.

o The steps during the judicial process:

In referring to the Zoulficar case, the arrest at sea (Step I) does not form part of the judicial process as the Criminal Procedure Code itself does not contain provisions regarding an arrest at sea. Indeed, based on the Criminal Procedure Code, the judicial process begins only when the judicial police officers, who are the only authorized personnel of the judicial system to make an arrest, take under their responsibility the suspected offenders. As described in table 1 below, a judicial arrest followed by an investigation (Step II) is normally performed by the judicial police officers who are either from the National Gendarmerie or the National Police after the transfer of the suspected pirates or armed robbers at sea by the Navy as experienced during the Zoulficar case. The judicial police officers' investigation is conducted under the supervision of the public prosecutor of the First Instance Court which has territorial jurisdiction in the region where the port of disembarkation of the suspected offenders took place⁶⁷. After the investigation, the public prosecutor then submits the case to the instructional judge of the first instance court to enable him to proceed for the first degree prosecution (Step III). Having established that the suspected offender can be charged of the offenses, the instructional judge processes the case to the general prosecutor at the Court of Appeal in order for this latter to proceed for a second degree prosecution in collaboration with the accusation chamber. When it is assessed by the accusation chamber that the prosecution is valid, it then submits the case for trial to the Criminal Court of the Court of Appeal (Step IV).

⁶⁵ Act n°2004-020 of August 19, 2004 related to money laundering, tracing, confiscating and international co-operation on proceeds of crime, article3

⁶⁶ Ibid., article 28 and following

⁶⁷ Criminal Procedure Code, article 31



Steps	In charge	Detention condition	Reference		
Step I : Arrest and seizure at sea	Navy	Not provided in the legislation	Maritime Code of 2000 (Art. 1.5.06)		
Step II : Arrest on land and investigation (The right to have a counsel is provided by law, CPC, art. 53)	Judicial police officer under the supervision of the Public Prosecutor: Either National Gendarmerie or National Police	Maximum time of detention: 48 hours (CPC, art. 136). If the arrest was done outside the jurisdiction of the Judicial police officer an additional day per 25 km is added to the 48 hours (CPC, art. 136, 137)	CPC (Art. 31, 53, 123, 124,126, 127, 128, 133, 136, 137, 138, 138 bis, 153)		
Step III: Prosecution (The right to have a counsel is provided by law, CPC, art. 53 bis)	Public Prosecutor (First Instance Court) Instructional Judge (First Instance Court) General Prosecutor (Court of Appeal) Accusation Chamber (Court of Appeal)	Preventive custody: Maximum time of detention is 8 months (CPC, art. 334 bis) If necessary for the purpose of the prosecution, an extension of 6 months renewable once may be allowed	CPC (Art. 53 bis, 149, 151,153, 154, 172, 179, 244 to 306, 309, 334, 334 bis)		
Step IV: Trial (The presence of a counsel with the accused person is mandatory during the trial. If the accused person did not yet choose his counsel, a court appointed lawyer will be designated to defend him, CPC, Art. 65 to 67)	Criminal Court (Court of Appeal)	Conviction	CPC (Art. 18 to 22, art. 65 to 67, 373 to 394, 404 to 444)		

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o Right to have a counselor and the presence of a translator during the judicial process:

The Criminal Procedure Code includes provisions giving the right for the suspected offenders to have a counselor during the investigation and the prosecution phases⁶⁸. Furthermore, during the trial, the presence of a counsel to defend the accused person is required⁶⁹. If a counselor is not yet chosen by the accused person at the commencement of the trial, the court will appoint a lawyer to ensure his defense⁷⁰.

o Preventive custody during the investigation and the prosecution :

During the investigation by the judicial police officers, a maximum time of 48 hours of preventive custody is given. It is extended by one day per 25 kilometers when

⁶⁸ Criminal Procedure Code, article 53 & 273

⁶⁹ Criminal Procedure Code, articles 65 & 422

⁷⁰ Id.



the location of the arrest is outside the city where the investigation is supposed to be conducted⁷¹. Similarly, during the prosecution phase, the preventive custody should not exceed 8 months except for the express necessity for the correct accomplishment of the prosecution. It has to be noted that the suspected person can appeal the decision for a preventive custody during the prosecution phase through its counselor.

o The request for a translator and an expert :

During the judicial process the presence and request for a translator and an expert are allowed by the Criminal Procedure $Code^{72}$.

o Rules of evidence :

The general rule is that the judges cannot establish their decisions on evidence that is not provided in court and cross-examined before them⁷³. The evidence can be given orally through witness, confession, written evidence and through expertise.

o Appeal:

The decision of the Criminal Court can be appealed in the Cassation Court which is affiliated to the Supreme Court⁷⁴.

o Case of children involved in maritime piracy and armed robbery against ships:

The legislation regarding the juvenile involved in a criminal case is provided in the Presidential Order nº 62-038 of September 19, 1962 concerning the protection of the child read in conjunction with the Criminal Procedure Code. When a child commits a felony, the Malagasy criminal law sets the age of 13 to be the minimum age for a person to be criminally liable⁷⁵. Therefore, a child involved in piracy and armed robbery against ships above 13 years old is criminally responsible as an adult. However, the child between the age of 13 and 18 years old enjoys the excuse of the minority when defining the penalty. The treatment is also different during the judicial process in terms of detention and trial. Indeed, during the arrest, the investigation and the prosecution, the case will be treated by the same authorities as depicted in the table 1 and the suspected minor offender is granted the same rights as the adults⁷⁶. However, during the trial part, the Juvenile Criminal Court, which is a court belonging to the Court of Appeal, hears and determines the case⁷⁷. When convicted, the juvenile criminal is granted a less harsh penalty due to the excuse of the minority. For example, if maritime piracy is penalized by a life forced labor for an adult, the juvenile pirate between the age of 13 and 18 is convicted for 20 years of imprisonment⁷⁸. In terms of detention either as accused or convicted person, the minor should be separated from the adults in prison as provided by law.

77 Ibid., article 26

⁷¹ Criminal Procedure Code, articles 136 & 422

⁷² Ibid., article s265, 392 & 426

⁷³ Ibid., articles 373 to 394

⁷⁴ Ibid., articles 444, 539, 540, & 542

⁷⁵ Presidential Order nº 62-038 of September 19, 1962, concerning the protection of the child, article 24. Confirmed by the Public Prosecutor of the First Instance Court of Antsiranana, Madagascar in his exchange of email with the author on August 23, 2012.

⁷⁸ Ibid, article 45, paragraph 1

The analysis of the Malagasy Criminal Procedure Code related to the judicial process permitted to realize that its provisions allow the investigation, prosecution and the trial for the account of maritime piracy and armed robbery against ships without too much hindrance. The provisions related to the right for the suspected pirates and armed robbers at sea to have a counselor during the judicial process, the allowance for a translator and the rules pertaining to the preventive custody seem to respond to the requirement of the international law of human rights. Similarly, the provisions on the judicial process for juvenile criminals embedded in the Presidential Order of September 19, 1962 concerning the protection of the childhood are in conformity with the Convention of the Rights of the Child (CRC). Therefore, no particular amendments are needed in this regard. However, the only issue that needs to be addressed resides in the rules of evidence where the requirement of witness's appearance in court during the trial may be difficult especially in cases involving foreign nationals and foreign ships. Indeed, the witnesses in the context of maritime piracy and armed robbery against ships are often the seafarers or passengers who were victims of such acts and the Navy personnel who came to rescue them and arrested the pirates.

- Absence of provisions on international cooperation:

The Maritime Code of 2000 does not contain any provision related to international cooperation for the repression of maritime piracy despite the fact that it utilizes the UNCLOS as main legal reference. This fact appears to be a major deficiency in the existing national legislation on the issue. As it is identified previously, the international law on maritime piracy and armed robbery at sea promotes and even requires international cooperation for the repression of such crimes.

4.2 Proposed areas of improvement

- Definition of the offense:

To rectify the deficiencies in the current definition, three definitions are proposed to be introduced in terms of definition of the offenses by referring to the UNCLOS, the International Maritime Organization resolution A 1025 (26) and the SUA Convention:

 Definition of "maritime piracy" as defined by the article 101 of the LOSC but amended in introducing the term "EEZ" in order to cover acts committed on the high seas and the EEZ:

"Maritime piracy" consists of any the following acts:

- (a) any illegal acts of violence or detention, or any acts of depredation, committed for private ends by the crew or the passengers of a private ship or a private aircraft, and directed:
 - i. against another ship or aircraft, or against persons or property on board such ship or aircraft on the high seas or in the EEZ of Madagascar ;
 - ii. against a ship, aircraft, persons or property in a place outside the jurisdiction of any State;
- (b) any act of voluntary participation in the operation of a ship or of an aircraft with knowledge of facts making it a pirate ship or aircraft;

- (c) any act of inciting or of intentionally facilitating an act described in subparagraph (a) or (b)."
- (2) Definition of "armed robbery against ships" or "armed robbery at sea" to cover acts committed in the territorial sea and internal waters:

"Armed robbery against ships" or "Armed robbery at sea" consists of any of the following acts:

- (a) any illegal act of violence or detention or any act of depredation, or threat thereof, other than an act of maritime piracy, committed for private ends and direct against a ship or an aircraft, or against persons or property on board such a ship or an aircraft, committed within Madagascar's internal waters or territorial sea;
- (b) any act of inciting, or of participating, or of intentionally facilitating an act described above."
- (3) Definition of "maritime violence" which should reproduce verbatim the definition of unlawful acts against the safety of maritime navigation as provided by the SUA Convention article 3 to cover any acts that are perpetrated from the inside of the ship and to fill gap generated by the two ships/aircraft rule in the maritime piracy definition.

In fact, the designation of the amended legislation would be Maritime Piracy, Armed Robbery against Ships and Maritime Violence Act in which a chapter would treat maritime piracy and armed robbery against ships and another chapter would cover maritime violence which is related to the implementation of the SUA Convention but would allow filling the gap of the previous chapter. In other words, if the offense is not be cover by maritime piracy and armed robbery against ships, it will be treated under the maritime violence.

- Amendment of the provision on criminalization:

In the process of correcting the deficiencies related to the criminalization embedded in the current national legislation on maritime piracy and armed robbery against ships, it is suggested to simplify the provisions related to that effect rather than going into details as they are currently done with considerations that do not constitute fully these crimes. Hence, it is recommended to criminalize the defined offense as a whole in one package instead criminalizing each element of the definition. In this regards, since participation, incitement and facilitation are already included in the definition of maritime piracy and armed robbery at sea, criminalizing the commission of both acts suffices to criminalize also participation, incitement and facilitation. However, the attempt should be included separately in addition as it is not inserted in the definition of the offenses. As maritime piracy and armed robbery at sea are similar in nature, they should therefore be penalized by the same penalty. Hence, the criminalization provision should be established as follows:

"Anyone who attempts to commit or commits maritime piracy or armed robbery against ships as defined in the present act shall commit an offense and shall, on conviction, be liable for lifetime forced labor".

The penalty of lifetime forced labor is chosen as it is the reference penalty given in the Maritime Code of 2000 and it seems to be a deterrent penalty. Additionally, for the sake of the protection of the child, it is also suggested that the recruitment and use of children and youth in maritime piracy and armed robbery against ships should be criminalized also and



an appropriate penalty should be given for the recruiter(s).

- Jurisdiction:

In terms of jurisdiction, it is important to specify which court is competent to hear and determine maritime piracy and armed robbery at sea cases. As the offenses are committed either in the high seas, or in the EEZ, or in the territorial sea, or in the internal waters, it is fundamental to extend by law the jurisdiction of the Criminal Courts, which is mainly a territorial jurisdiction according to the Malagasy Criminal Procedure Code, to those maritime zones. In addition, it should be clarified how the location of the competent Criminal Court is determined. In this regard, the location of the port where the transfer of the suspected offenders will be conducted for the commencement of the judicial process should be the determining factor. Consequently, the provisions related to the jurisdiction should be written as the following:

- "(1) For the purposes of this Act, the jurisdiction of the Malagasy Criminal Courts as provided in the Criminal Procedure Code extends to:
 - (a) the internal waters and within the territorial sea of Madagascar for armed robbery against ships offenses
 - (b) the EEZ and on the high seas for maritime piracy offenses;
- (2) The Criminal Court exercising the jurisdiction is the one having jurisdiction within the region where the port of disembarkation of the suspected offenders for the purpose of their transfer to the judicial competent authorities is located."

- Clarification of the provisions on enforcement measures, competent authorities for the arrest, arrest and detention at sea arrangement:

It appears that in order to strengthen the provisions related to the enforcement measures, consistency between the legislation related to maritime piracy and armed robbery against ships and the Malagasy Criminal Procedure Code needs to be ensured and the following issues should be clarified within the legislation: the appointment of the competent authorities, their legal status, their rights and duties.

o Appointment of the competent authorities for the arrest and seizure:

With the reference to the UNCLOS, article 107 related to the ships and aircraft entitled to seize on account of maritime piracy, the national legislation should appoint in a specific manner the government agencies that are authorized to do so at the national level. In this regard, in Madagascar context, it should be primarily the Navy as it is the government agency in charge of maritime security and due to the fact that it is the one referred by the UNCLOS. However, for the purpose of combining the effort, other agencies that have operational capabilities may also be included additionally (i.e. Malagasy Air Force, National Gendarmerie and Fisheries Surveillance Centre Administration).

o The legal status of the competent authorities:

In referring to the Malagasy Criminal Procedure Code, to be legally capable to ascertain a criminal offense including to conduct an arrest and a seizure, it is necessary to be a judicial police officer or law enforcement officer. In this regard, as the Navy (and other government agencies as the case may be) is appointed as the competent authority that will be conducting an arrest and seizure at sea on account of maritime piracy and armed robbery against ships, its personnel should be given the status of judicial police officer for the purpose of repressing such act. The fact of giving the Navy personnel the status of judicial police officer for the account of maritime piracy and armed robbery at sea will render legal the arrest and seizure that they perform at sea in relation to the procedure and practice within the national judicial system. Only the National Police and Gendarmerie are stated specifically in the Malagasy Criminal Procedure Code as judicial police officers. They work mainly under the supervision of a public prosecutor or an instructional judge as the case may be and the general prosecutor of the Court of Appeal. However, article 124 and 128 of the Malagasy Criminal Procedure Code provide that the status of judicial police officer can be granted to some civil servants by the law. It is pursuant to the provisions of these two articles that the Navy personnel are granted the status of the judicial police officer on account of maritime piracy and armed robbery at sea. In terms of jurisdiction's limit, they should be given a national competency so that they can process a case anywhere in Madagascar.

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The rights and duties of the competent authorities and the procedures during the arrest and seizure at sea:

Pursuant to the UNCLOS provisions, the right of visit, the right of hot pursuit and the right of arrest and seizure are granted to the competent authorities. Every element of these rights should be detailed in the provisions in the national legislation to avoid ambiguity especially during the operational phase of the repression of maritime piracy and armed robbery at sea. Overall, these rights should include stopping, boarding, inspecting, searching, detaining or seizing a pirate ship or aircraft, or a ship or aircraft taken by and under the control of pirates. It should encompass also the right to arrest the suspected offenders, to seize the property on board and any means used to commit the offense, and to divert the seized ship to a port or an appropriate location for the purpose of further examination or for the judicial process. Here, it is of capital importance to affirm that in pursuing the right of visit, the competent authorities may use force that may be necessary. In fact, as pirates and armed robbers at sea often use deadly weapons and may not compel to the arresting party instructions during the arresting phase, it is important to authorize by law the use of force.

It is also important to clarify in the national legislation the procedure to be followed during the arrest and detention of the suspected offenders at sea as well as during the seizure of the pirate ship or aircraft. Indeed, for the purpose of respecting the human rights related to arbitrary arrest and detention, it is vital to establish a legal basis regulating the arrest and the detention of the suspected offenders at sea. When an arrest and a seizure have been realized at sea, it should be reported immediately to the judicial authorities intended to handle the case through the Navy chain of command. The reason for referring immediately to the judicial authorities intended to handle the case is (1) to make them aware of the arrest, (2) to enable them to be informed and to monitor the detention at sea and (3) to enable them to be prepared to take the responsibility over the case when the suspected offenders arrive in port for the beginning of the judicial process. The condition of detention at sea needs to have some legal background similar to the detention after an arrest on land. Indeed, after any arrest on land, the Criminal Procedure Code provides that the judicial police officer has only 48 hours to detain a suspect for the purpose of an investigation⁷⁹. However, if the arrest was performed outside of the limit of the city of residence of the judicial police officer, the 48 hours are extended one day per 25 kilometers⁸⁰. Similar standard should be applied for the arrest at sea by taking into account the operational requirements such as the distance of the location of the arrest at sea to the nearest port where is located a competent court, the technical condition of both the arresting ship and the seized ships as well as other factors such as the weather conditions during the transit. On this particular issue, the French system can be considered as an example. Indeed, after the expiration of the 48 hours of detention at sea, 120 hours extension can be requested to the custodial judge under the French law on maritime piracy. In the Malagasy context, such request for extension can be addressed to the public prosecutor who is supposed to supervise the investigation of the judicial police officer.

- Amendment of the rules of evidence provisions:

For several reasons such as the expense for supporting the travel and the stay of witnesses as most the time they live in different parts of the world, or witnesses' incapacity to attend the trial for post trauma and health reasons, or retention on duty at sea of the witnesses as they are sailing under new contract, difficulties may arise to ensure their attendance in court on the day of trial. To overcome such problem, the legislation related to the rules of evidence should be amended to accept a video released testimony so that the witness can testify through a videoconference in court. This practice has been already adopted by countries like the Seychelles and Kenya.

- Introduction of provisions on international cooperation in the legislation:

Indeed, without interstate cooperation, it is practically impossible to address the problem. In fact, a maritime piracy and armed robbery at sea case may involve several people coming from different countries as suspected offenders, victims, arresting party or even as investigators, prosecutors and judges. Thus, it is obvious that international cooperation is vital. To be able to frame and to give a basis for such international co-operation, provisions in this regard should be incorporated in the national legislation in order to have the force of law. The advantage of having international cooperation provisions in the national legislation is the authorization provided by the law to engage the country in various fields of cooperation. These may include information sharing, law enforcement cooperation, extradition, transfer of suspected pirates, joint investigation, mutual legal assistance, post trial transfer of convicted offenders and capacity-building. The choice of entering into an agreement with foreign States in any of the fields proposed is a matter of public policy choice but in any case they should be already stated in the national legislation related to maritime piracy and armed robbery at sea.

⁷⁹ Criminal Procedure Code, article 136

⁸⁰ Criminal Procedure Code, article 137

5. Required additional measures: Strengthening the judicial capacity

Conducting a reform of the national legislation on maritime piracy and armed robbery against ships is not sufficient but improving the judicial capacity is also of capital importance. Indeed, in order to properly implement and enforce the established national legislation on the issue, having an adequate judicial capacity becomes essential. The judicial capacity concerns the human resources of the judiciary in terms of manpower and skills to handle maritime piracy and armed robbery against ships cases in one hand, and the refurbishment of the courts' infrastructure as well as the prisons' infrastructure in the other hand.

5.1 Human resource capacity building:

Maritime piracy and armed robbery against ships are quite new phenomena for the judiciary institution in Madagascar. So far, only the "M/V Zoulficar" case was handled by one of the Criminal Courts. For this reason, the experience of the judicial personnel on the issue is still very limited. Therefore, there is a real need for training and capacity building for the law enforcement officers in terms of investigation related to such crime. The prosecutors, the instructional judges, and judges should also receive training related to the international and national legislation on the matter, exchange experiences with their foreign counterpart to get to know their experiences in dealing with the issue. Additionally, there is a need to consider of forming a pool of defense lawyers to ensure the counseling and eventually the defense of the suspected offenders in case they do not have the possibility to have their own. Finally, there is also a need of forming a pool of translators in order to ensure a fair and equitable trial.

5.2 Improving the existing judicial infrastructures:

Pursuant to the proposed area of improvement in the national legislation on maritime piracy and armed robbery against ships, the existing infrastructure needs to be improved.

- Courts' infrastructure:

As stated in the proposed national legislation on maritime piracy and armed robbery against ships previously discussed, the competent Criminal Courts are those having jurisdiction in the port where the suspected offenders are brought and handed over to the judicial police officers in order to begin the judicial proceedings. At present, there is one Criminal Court which is affiliated to a Court of Appeal in the each coastal city where the 5 international ports in Madagascar are located. However, to support video linked evidence, each court room needs to be equipped with communication means that will permit the conduct of a video conference with the witnesses.

- Prisons' infrastructure:

Madagascar has in total 40 prisons. There is a prison in each coastal city where is located a criminal court that is likely to try maritime piracy and armed robbery at sea cases. However, prisons in Madagascar are very old as several of them were constructed during the colonization period and in addition a great majority is overpopulated. This situation has an impact in terms of compliance with human rights standards. For this reason, there is a real need either to expand and to rehabilitate the existing prisons or proceed to the construction of new prisons in order to meet the human rights standards and to accommodate convicted pirates and armed robbers at sea.

6. Conclusion

With the scourge of maritime piracy and armed robbery against ships in the region where Madagascar is located and off its coast, there is a crucial need to have an adequate national legislation on the matter and an appropriate judicial capacity to better prepare to address the issue. Madagascar has a national legislation that takes into account the UNCLOS as a principal reference. However, after the analysis of the current legislation, it appears that it contains a certain number of deficiencies that need to be rectified with regards to various key legal elements. Hence, amendments are proposed in the definition of the offenses by introducing the notion of "maritime piracy" to cover those acts committed on the high seas and the EEZ, "armed robbery against ships" or "armed robbery at sea" to take into account the acts committed in the territorial sea and the internal waters, and "maritime violence" to cover acts that are beyond the scope of the two ship rules of maritime piracy. The criminalization provisions are proposed to be simplified by considering the attempt and the commission of the acts as participation, incitement, and facilitation are already embedded in the definition of the offenses. Recruiting and using children in maritime piracy and armed robbery at sea activities are suggested to be criminalized. In terms of jurisdiction, the universal jurisdiction principle is maintained. However, the competent court is identified as the Criminal Court and its jurisdiction has to be clarified to be extended to the high seas, the EEZ, the territorial Sea and the internal waters. A certain number of amendments are also advanced in terms of the enforcement measures regarding the designation of the competent authorities to conduct such actions, their legal status, their rights and duties, and issues related to the arrest and detention at sea. It was realized that Criminal Procedure Code appears to reflect the requirement of the international human rights law when looking at the execution of the judicial proceeding. Nevertheless, an amendment of the provisions on rules if evidence was suggested to include video linked evidence. Finally, the introduction of a provision on international co-operation is recommended. On the basis of the proposed improvement of the national legislation, the judicial capacity needs to be enhanced in terms of human resource capacity building as well as in terms of infrastructure for courts and prisons. Nevertheless, it is important to highlight that adequate national legislation and judicial capacity constitute only the basis of the anti-piracy and armed robbery against ships actions but other components of operational, political and socio-economical dimension have to be considered too.


References

- International Maritime Organization. (1988). Convention for the Suppression of Unlawful Acts of Violence against the Safety of Maritime Navigation. Retrieved from http://cns.miis.edu/inventory/pdfs/ aptmaritime.pdf
- International Maritime Organization. (2010). Code of Practice for the Investigation of Crimes of Piracy and Armed Robbery against ships. London: IMO
- Ministry of Justice. (2000). *Criminal Procedure Code and Code of Justice of National Service*. Antananarivo: Imprimerie d'ouvrages educatifs.
- Murphy, M.N (2009). Small boats, Weak States, Dirty Money. Piracy and Maritime Terrorism in the Modern World. London: Hurst & Company.
- Rasamoely, G. (2000). Collection of maritime legislations (Acts, decrees, orders), Maritime Code of 2000. Antananarivo: Lohandro-ASFOMER
- Republic of Madagascar. (2005). Criminal Code. Retrieved from file:///F:/Judiciaire/Cp%C3%A9n.htm
- Republic of Madagascar. (1962). Presidential Order n° 62-038 of September 19, 1962 concerning the protection of the child.
- Republic of Madagascar. (2004). Act n°2004-020 August, 09 2004 concerning money laundering, tracing, confiscating and international co-operation on proceeds of crime. Retrieved from http://www.samifin.gov.mg/fr/fichier/Loi_2004_020.pdf
- United Nations. (1948). *The Universal Declaration of Human Rights*. Retrieved from http://www.un.org/ en/documents/udhr/index.shtml
- United Nations. (1951). *Convention relating to the Status of Refugees*. Retrieved from http://www2.ohchr. org/english/law/refugees.htm
- United Nations. (1956). Yearbook of the International Law Commission 1956, Volume II, Documents of the 8th Session including the report of the Commission to the General Assembly, 1957, New York: United Nations,
- United Nations. (1958). *Convention of the High Seas*. Retrieved from http://untreaty.un.org/ilc/texts/ instruments/english/conventions/8_1_1958_high_seas.pdf
- United Nations. (1979). *International Convention against the Taking of Hostages*. Retrieved from http:// cil.nus.edu.sg/rp/il/pdf/1979%20International%20Convention%20Against%20the%20Taking%20 of%20Hostages-pdf.pdf
- United Nations. (1966). *International Covenant on Civil and Political Rights*. Retrieved from http://www2. ohchr.org/english/law/ccpr.htm
- United Nations. (1989). Convention on the Rights of the Child. Retrieved from http://www2.ohchr.org/ english/law/crc.htm
- United Nations. (1997). The Law of the Sea, United Nations Convention on the Law of the Sea, Agreement relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea with Index and excerpts from the Final Act of the Third United Nations Conference on the Law of the Sea. New York: United Nations.
- United Nations. (2000). United Nations Conventions against Transnational Organized Crime and the protocols thereto. Retrieved from http://www.unodc.org/documents/treaties/UNTOC/ Publications/TOC%20Convention/TOCebook-e.pdf
- United Nations Security Council (2011). United Nations Security Resolution S/RES/2011. Retrieved from



http://www.un.org/ga/search/view_doc.asp?symbol=S/RES/2015%20(2011) United Nations Office on Drugs and Crime & United Nations Economic Commission for Europe. (June,

2012). Principles and framework for an international classification of crimes for statistical purposes. Report of the UNODC/UNECE task force on crime classification to the conference of European statisticians. Retrieved from http://www.unodc.org/documents/data-and analysis/statistics/ crime/Report_crime_classification_2012.pdf

My professional life before, during and after graduation from the WMU and the "Sasakawa connection".

Dallas Eric Laryea (Capt), Ghana

Before WMU

Prior to enrolling at the World Maritime University (WMU), professional I have being a seafarer and then a lecturer.

My sailing career spanned a period of thirteen (13) years, starting as a cadet officer in 1995 after graduating with a two (2) year Higher National Diploma in Nautical Science from the then Regional Maritime Academy (RMA) in Accra, Ghana. I retired from sailing in December 2007 as a master haven risen through the various ranks over those years and also obtained my Master Mariner Certificate of Competence.

I joined the faculty of the Regional Maritime University, former RMA, as a lecturer in February 2008. Then in 2010 I gained admission to pursue Maritime Safety and Environmental Administration (MSEA) at WMU which was made possible by the gracious sponsorship by the Nippon foundation.

Stay at WMU - Malmo

My study at WMU and stay at Malmo, Sweden, has given me varied rich experience, knowledgeand composure through activities such as lecture times, meeting research assignment submission deadlines, preparing for examinations, the rich worldwide field study travels, football playing times and parties which is my pressure relieve button just to mention a few. It is important to mention the invaluable friends and classmates all over the world network I have gained through my studies at WMU.

After Graduation

I rejoined the RMU in December 2011 after my successful graduation from WMU, and then in September 2012 I was appointed the acting Head of Department for the Maritime Safety Department of the Faculty of Maritime Studies. There was a vacancy for a position in the International Maritime Organization (IMO) for the IMO Regional Coordinator for West and Central Africa (Anglophone) based in Accra, Ghana and as destiny will have it, I applied and was appointed to the position and assumed office on 1st November, 2012, after successfully going through the pre-screening processes.

The "Sasakawa connection" has played a major part in the role I am playing today in the maritime sector through the office I occupy today.





culture



 ✓ Back to the classroom

✓ New
appointm
ent with
the IMO







Closing Session

WMU SASAKAWA FELLOWS' NETWORK MEETING IN THE AFRICAN REGION



Closing Remarks

Eisuke Kudo Special Adviser, OPRF

Good morning, everyone.

As my closing remarks, I would like to address a speech in my own way.

Since Sasakawa Fellows' Network Meeting held in Bangkok 2007 and in Colombo 2010, I had been wishing to hold a similar Regional Network Meeting somewhere in Africa.

And about one year ago when we heard about Mr. Sasakawa's possible attendance to the SAFE 20th Anniversary in Ghana, we had started to prepare for this Regional Network Meeting in Ghana since then.

It was a pity that we were not able to meet Mr. Sasakawa on this special occasion. As you are aware, his unexpected cancellation was announced the other day due to his family reason.

In fact, his role as a leader has become more and more important globally and domestically.

We are aware that there are many programs on capacity building supported by The Nippon Foundation. And I am sure that he has a strong attachment for WMU Sasakawa Fellowship Program. I suppose the reasons are as follows.

International Unification based on the similar business of maritime affairs

Animation for interchanging among graduates

Individual report or letter directly addressed to him

He always seeks for the opportunities to meet WMU Sasakawa Fellows if the schedule allows him to visit your country.

I have a routine for myself to visit his office to hand over a new edition of the Newsletter when it comes out, and this is a very worth opportunity to inform him about latest news on the Sasakawa Fellows and their activities. Thanks to his secretary's office, they give me the first priority to see him even though a very short time.

Now, I am very pleased to see the reports drafted by all the delegates here in great cooperation. You all did deliver positively on many subjects, agenda items what and how our future network shall be.



Besides, you exchanged a wide variety of information on maritime affairs and very frank opinions during the meeting.

Moreover, we could make mutual recognition each other beyond the year of graduation year and countries.

It is you who came to participate in this meeting, so you are the core of all WMU graduates in Africa.

I am very happy to return to Japan bringing with my firm belief as mentioned. I am going to make an appointment with Mr. Sasakawa to let him know about this successful meeting.

Last but not least, I would like to express my gratitude to prof. Hikima, Mr. Marumoto, and all Ghanaian Fellows. This network meeting would not have succeeded without their great cooperation.

Inclosing, I wish all of you here success in your careers and future activities. Von voyage

Nov. 9, 2013

Country Report

WMU SASAKAWA FELLOWS' NETWORK MEETING IN THE AFRICAN REGION



CAMEROON

1. Country Overview

Land area : 475,000 km²

Population: 20 million

Main industries : - Cameroon Development Corporation

- Cameroon oil Refinery

- Autonomous Port of Douala
- Cameroon Aluminum Company
- Cameroon Railway Corporation
- Cameroon Airlines Corporation
- SODECOTON

Main trading partners : China, Europe, Japan, England, Dubai

2. Maritime Overview

(1) Maritime industry

Shipping and water transportation :

Shipping and water transportation is carried out by authorized companies, some of which include : MAERSK, MSC, DELMAS, SDV, GETMA etc...

Ports and harbor : Main Ports - Douala

Subsidiary Ports - Garoua, Tiko, Limbe and Kribi

Seafarers : Many seafarers available but no seafarers' register exist

Naval arch./dockyards:Only one in Cameroon known as the Cameroon Shipyard Engineering LTD

GDP total :

GDP ratio against all industries :

(2) Main ports including planned ports.

Name : Douala port

Cargo handling capacity : About 400,000T/ year

Characteristics : - Container terminal

- Cement /petroleum terminal
- Two gantry cranes
- Multipurpose terminal
- Depth under chart datum is approx. equal to 6 m

Planned ports : - Creation of a deep sea port in Kribi. The project is going on.

- A shipyard project is in the pipeline for the creation of a port in Limbe, for the importation of cement

(3) Fleets :

Cargo ship - number of fleet ; both domestic and ocean-going category of ships 500GT or more : Mostly domestic, the number is not known due to inconsistency in handling data within the maritime administration.

Ferry, Passenger ships: 24 metres or more or above 20GT: About 7 ferry / passenger ships exist



(4) Maritime policy (government policy, e.g future planning)

Government policy : The Cameroon Merchant Shipping Code

Future planning : Unknowm

(5) Seafarer/maritime education and training institutions

No regional maritime institution exists in Cameroon. However, there are a number of local maritime training institutions.

Name of institution : GEPMARE, EIMA, BATEAU ECOLE

Number of graduates/year :

Year of establishment :

(6) Foreign countries supporting/assisting in the maritime field :

Country name	Project name	Description	Year(s)	Size (amount \$) of grants/loans
JAPAN	Scholarships	Sponsors Cameroonians at WMU	Annually	Unknown
KOREA	The Cameroon Shipyard Project	Development of a new port in Limbe, for the importation of cement.		Unknown
CHINA	Scholarship (two or three candidates)	3 weeks annual training on the implementation of international maritime law in Africa.	Annually	Unknown
CHINA	Port Development	Sponsors Kribi port development under Bill operate transfer.		Unknown

(7) Relationship with Japan in the maritime field

Economic cooperation in recent years :

Technical cooperation, if any : Technical cooperation exist in maritime training and education. Others are not known

3. Maritime organizations and WMU graduates distribution.

(1) Organizational Charts: (Appendix submitted) which organization is the genuine focal point to IMO?

The Ministry of Transport is the genuine focal point to IMO.

(2) How many WMU graduates are positioned in each organization?

Presently 4 WMU graduates are positioned in the Department of Maritime Affairs and Inland Waterways / Ministry of Transport.

(3) Selection process for WMU candidature. Is it managed by a particular department?

Selection process for WMU candidature is not managed by any particular department. Candidates are either nominated by the Minister of Transport or any other official in the Ministry.



COTE D'IVOIRE

1. Country Overview

Land area :	322.462 km^2
Population :	22 millions
Main industries :	- Agriculture
	- Agro-industrial
	- Manufacture
	- Hydrocarbon and mining
	- Textile
	- Services (shipping, land and air transport, communication,
	insurance, banking, tourism, etc.)
	Germany (9,6 %), Nigeria (9,1 %), Holland (8,3 %), France (7,2 %),
	USA (6,9 %), Burkina Faso (4,4 %), China

2. Maritime Overview

(1) Maritime industry

Côte d'Ivoire is located on the shipping route from Europe/America to Asia via the Cap on Good Hope. As such, it represents a cross road for importation, exportation or transshipment of goods from America, Europe of Asia.

Several important multinational shipping companies' trade between Ivorian ports, in particular, port of Abidjan's and ports from other continents. We have for example: CMA/CGM Group, SAFMARINE, MESSINA LINES, MAERSK LINES, DELMAS, GRIMALDI LINES, UNICARGO, BACOLINER, NILEDUTCH, NORDANA, BOLTEN, LDR, SCESO, ESL EURO AFRICA LINE, SMITH & KRAFT, MSC etc.

Many shipping companies (consignees, forwarding agents, ship yards, ship providers, etc.) are operated in Ivorian ports.

(2) Main ports including planned ports.

Port of Abidjan

- Ship's calling traffic (mainly container ships, general cargos, tankers, bulk carriers and Ro-Ro): 2,914
- o Overall port traffic (oil, general cargos and fishing products): 21 713 810 tons (13 612 599 for exports traffic and 8 101 211 for import traffic)
- o Container traffic (full, empty and transshipped) : 633 917 EVP
- o Transshipment traffic
- o Transit traffic, mainly from and to Burkina Faso, Mali and Niger: 1 613 132 tons.
 - We can see by these statistics that the Port of Abidjan and shipping activities in general play a great role in the overall economic activities of Côte d'Ivoire. In fact, the port of Abidjan's represents:
- o 90% of customs incomes;
- o 60% of public income (customs duties and taxes);
- o 65% industrial units of the country



- o 50 000 employees;
- o 70% of the Gross Domestic Product;
- o 70% of foreign exchanges of hinterland countries (Burkina, Mali, Chad, Niger, Guinea).
- o Important tool of cooperation and integration in West Africa.
- New project of building a 2nd container terminal at the port of Abidjan.

Port of San Pedro

- o Ship's calling traffic (mainly container ships, general cargos, tankers, bulk carriers and Ro-Ro): 518
- o Overall port traffic (oil, general cargos and fishing products): 3 230 398 tons (13 612 599 for exports traffic and 8 101 211 for import traffic)
- o Container traffic (full, empty and transshipped) : 246 187 EVP

(3) Fleets :

There is no longer national shipping company. The fleets described below belong to foreign shipping companies calling at the port of Abidjan.

Boats registered under national flag are only fishing and supply boats (35 boats).

(4) Maritime policy

National Plan of Development (including shipping programme) : Emphasizes on the promotion of maritime security/safety, the creation of a shipping company and the development of inland transportation.

(5) Seafarer/maritime education and training institutions

- i. Around 2,000 seafarers
- ii. MET institutions: Regional Academy of Sea Sciences and Techniques established in 1987
- iii. Number of graduates/year:
- Officers (deck and engine officers): around 80

Ratings (including fishing boats): around 30

(6) Foreign countries supporting/assisting in the maritime field :

i. China: widening and deepening the canal of Vridi of the port of Abidjan

(7) Relationship with Japan in the maritime field

- i. Economic cooperation: Japan is sponsoring and assisting my country on studies on urban planning of Abidjan including a plan for the development of inland transportation.
- ii. JICA training program
- iii. 1980s : sponsoring of the Regional Academy of Sea Sciences and Techniques established in 1987.

3. Maritime organizations and WMU graduates distribution.

(1) WMU graduates distribution

Organization	WMU Graduates	Positions
Ministry of Transport/General Directorate of Port and Maritime Affairs (DGAMP) DGAMP is the genuine focal point to IMO	3	-Deputy General Director -Technical Advisor of The General Director -Research Analyst (Sasakawa fellow)



Organization	WMU Graduates	Positions
Maritime Organization of West and Central Africa (MOWCA)	1	Technical Director
Regional Co-ordination of IMO (west and central Africa's francophone states)	1	Regional Co-coordinator
Navy	2	
Retired	1	
TOTAL	8	

3- Selection process for WMU candidature



4. Overall Presentation

The Republic of Côte d'Ivoire is located in West Africa on superficies of 322.462 sq. km. She is boarded by Mali and Burkina Faso in the north, by Liberia and Guinea in the west, by Ghana and the Atlantic Ocean in the south.

Côte d'Ivoire possesses a maritime space of 520 km long and an EZZ of about 203 700 sq. km from east to west. Besides, there is inland waters area composed of lagoon, rivers and lakes. I am going to insist on lagoons which are more exploited for inland waters transportation.

The overall population is about 22 million people.

5. Shipping and port traffic

Côte d'Ivoire is located on the shipping route from Europe/America to Asia via the Cap on Good Hope. As such, it represents a cross road for importation, exportation or transshipment of goods from America, Europe of Asia.

Several important multinational shipping companies' trade between Ivorian ports, in particular, port of Abidjan's and ports from other continents. We have for example: CMA/CGM Group, SAFMARINE, MESSINA LINES, MAERSK LINES, DELMAS, GRIMALDI LINES,

SOPRF

UNICARGO, BACOLINER, NILEDUTCH, NORDANA, BOLTEN, LDR, SCESO, ESL EURO AFRICA LINE, SMITH & KRAFT, MSC etc.

After the decrease of -3.4% observed in 2011because of the social and political crisis, the Abidjan's port traffic increased to +30.5% in 2012. It is the sign of the renewal dynamism in the economic activities of Côte d'Ivoire in the aftermath of the crisis, confirmed by following statistics of Abidjan's port:

- Ship's calling traffic (mainly container ships, general cargos, tankers, bulk carriers and Ro-Ro) : 2914
- Overall port traffic (oil, general cargos and fishing products): 21 713 810 tons (13 612 599 for exports traffic and 8 101 211 for import traffic)
- Container traffic (full, empty and transshipped) : 633 917 EVP
- Transshipment traffic
- Transit traffic, mainly from and to Burkina Faso, Mali and Niger: 1 613 132 tons.

We can see by these statistics that the Port of Abidjan and shipping activities in general play a great role in the overall economic activities of Côte d'Ivoire. In fact, the port of Abidjan's represents:

- 90% of customs incomes ;
- 60% of public income (customs duties and taxes);
- 65% industrial units of the country
- 50,000 employees;
- 70% of the Gross Domestic Product;
- 70% of foreign exchanges of hinterland countries (Burkina, Mali, Chad, Niger, Guinea).
- Important tool of cooperation and integration in West Africa.

6. Inland Transportation

Côte d'Ivoire has an important inland water network long of about 300 km from the border of Ghana to Liberia and on superficies of about 1200 sq. km.

This inland water, which is a lagoon, is used from very long time for transportation. Today, inland transportation in Abidjan is shared between a modern company (SOTRA) exploiting modern boats and traditional small enterprises using temporary means. The inland transportation network is constituted by 20 lines within the district of Abidjan's, an interurban line between Abidjan and Grand-Lahou and an international line between Côte d'Ivoire (Frambo) and Ghana.

The transportation company (SOTRA) exploits a flotilla of 15 boats and three stations, while the small traditional enterprises exploit a total flotilla of 56 boats and more than 15 stations. The passenger traffic of inland transportation is about 10 million passengers.

Inland transportation plays an important role for economic development of Côte d'Ivoire because it facilitates the movement of populations from living to administrative and industrial areas. In addition, it provides to precarious and rural areas, not enough linked to road networks, means of transport to other areas. Because of its cheaper costs as compared to road transport (0.33 \$ instead of 1.11 \$), inland transportation contributes deeply to the reduction of poverty in Côte d'Ivoire.



7. Safety and security issues

Two departments under the General Directorate of Port and Maritime Affairs are in charge of safety and security issues:

- The Direction of Navigation, Maritime safety and Coast Guard in charge of safety issues, namely:
 - o flag state and port state control;
 - o SAR operations;
 - o accident investigation;
 - o safety of the navigation;
 - o safety of inland navigation;
 - o sea patrolling in the fight against armed robbery against ship and other security threats;
 - o safety of off shore platforms.
- The Direction of Port Affairs, Security and Public Property in charge of the implementation of the International Ship and Port Security Code (ISPS Code).
 - o Flag state and port state control

The Port State control service realizes annually around 1000 inspection of foreign ships and around 300 flag state controls regarding inland waters boats, fishing boats, pleasure, tug and pilot's boats.

o Accident investigation and SAR operations

For the last 3 years, around 10 shipping accidents happen in the territorial waters, the port area and in inland waters. The most significant were the sinking on a bus into the lagoon at Abidjan, ship fire and explosion in the Port of Abidjan, the sinking of a boat in inland waters and the sinking of a ship at Port of San Pedro's.

During all these accidents, the MRCC, generously equipped by IMO within the framework of the Convention of Florence, was very active in coordinating rescue operations in order to saving the victims.

o Sea patrolling in the fight against armed robbery against ship and other security threats;

With one case of armed robbery against ships in 2011, the security inspections have recorded in 2012 and 2013 several cases of armed robbery against ships either sailing on the territorial sea or calling at the port of Abidjan's.

It is the case of following ships:

- The MADONNA I, registered in Panama, attacked on 23rd December 2012 in the port area around 11:30 pm;
- The ITRI, registered in Panama, attacked on 16th January 2013 around 11:00 pm;
- The GASCOGNE, registered in Luxemburg, attacked on 3rd February 2013 at 70 miles off the Ivorian coast.

The piratical have prompted the maritime administration in cooperation with the navy to strengthen see patrolling in the port area.

8. Institutional organization

The Maritime Administration in Côte d'Ivoire is represented by the General Directorate of Port and Maritime Affairs (DGAMP) under the Ministry of Transportation. The DGAMP is in



charge of formulating and implementing the policy of the Government in the field of maritime transportation, maritime safety and security. As such, the DGAMP deals with issues regarding:

- Ships registration
- Shipping companies administration and control
- Maritime safety
- Maritime security, in particular regarding the implementation of ISPS Code;
- SAR administration and coordination
- Participation in the fight against armed robbery against ships, INN fishing and sea pollution;
- Participation in the safety and security of hydrocarbon off shore platforms.

In order to fulfill these missions, the DGAMP is organized in five Divisions with seven local services on the littoral (see the following graphic):

- Division of Maritime and Inland Transportations
- Division of Navigation, Maritime safety and Coast Guard
- Division of Port Affairs, Security and Public Property
- Division of International Cooperation and Seafarers Administration
- Division of Finance, Materiel and Equipment
- Local services (07).



ETHIOPIA

1. Country Overview

Land area : 1,100,000 km² Population : 93,000,000 Main industries : 1. Coffee 2. Gold 3. Oil Seed

- 4. Chat
- 5. Live Animals

Main trading partners : For Export Cargo : A. Switzerland

- B. Germany
- C. China
- D. Netherland
- E. Italy

For Import Cargo : $\ \mbox{I}$. China

- ${\rm I\!I}\,$. Saudi Arabia
- ${\rm I\!I}$. Italy
- \mathbbm{N} . India
- V . Kuwat

2. Maritime Overview

(1) Maritime industry

No Information

(2) Main ports including planned ports.

Djibouti Port

- (3) Fleets :
 - a. Admas
 - b. Andinet
 - c. Netsanet
 - d. Tekeze
 - e. Shebele &
 - f. Gibe
- (4) Maritime policy

No Information

(5) Seafarer/maritime education and training institutions

- A. 20 students were graduated in 2010.
- B. 23 students were graduated in 2011.
- Ethiopian Maritime Training Institute was established on July, 2010.

(6) Foreign countries supporting/assisting in the maritime field :

Israel

(7) Relationship with Japan in the maritime field

No Information



- 3. Maritime organizations and WMU graduates distribution.
- (1) Organizational charts: (Appendix submitted) which organization is the genuine focal point to IMO?

Ministry of Transport (As per the attached Organization Chart)

(2) How many WMU graduates are positioned in each organization?

No Information

(3) Selection process for WMU candidature. Is it managed by a particular department? No Information

4. Author of this summary report

Feseha Andualem (Ethiopia, Class of 2014)

Organization Chart





GHANA

1. Country Overview

Land area : 238,535 km² Population : 24,658,823 Main industries : Mining Light manufacturing Agriculture (Cocoa, Shea butter and other food processing.) Aluminum Smelting

Main trading partners : China, Japan (Cocoa), Nigeria, USA, United Kingdom, India

2. Maritime Overview

(1) Maritime industry

- No ocean going shipping
- Inland water transportation, mostly in the form of small indigenous crafts used for the transportation of people and foodstuff to and from villages along the Volta Lake. The Volta Lake Authority as less than 10 barges which is used for transporting goods such as petroleum products, cotton and foodstuff to and from the northern part of the country. It also serves some trade of landlocked countries such as Burkina Faso.
- One dry dock mostly for repair and maintenance of ships but has the capacity for ship construction.

(2) Main ports including planned ports.

Tema and Takoradi Ports, both owned by the Ghana Ports and Harbours Authority. Both ports are multipurpose ports but Tema has a dedicated container berth / terminal.

(3) Fleets :

Not applicable

(4) Maritime policy

- Port expansion
- Capacity building to manage armed robbery and piracy against ships in the territorial waters and beyond
- Expansion of maritime training facilities to train seafarers etc for the international shipping industry.
- Support shipping surveying.

(5) Seafarer/maritime education and training institutions

Regional Maritime University, Ghana

- Turns out averagely 300 graduates including cadets in marine engineering and nautical science.
- Upgrades cadets through class three to ship captains and chief engineer status.

(6) Foreign countries supporting/assisting in the maritime field

(7) Relationship with Japan in the maritime field

Japan supports the training of maritime personnel, mostly through the Nippon and



Sasakawa Foundation.

- 3. Maritime organizations and WMU graduates distribution.
- (1) Organizational Charts: (Appendix submitted) which organization is the genuine focal point to IMO?

The Maritime Authority of the Ministry of Transport, Ghana.

- (2) How many WMU graduates are positioned in each organization? WMU graduates numbers vary from organisation to organisation, averagely ranges from one to fifteen. GHPA has the majority of graduates.
- (3) Selection process for WMU candidature. Is it managed by a particular department? No particular department is involved. Potential students are nominated by their organisations to be selected by the Selection Board of the WMU.

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Ghana is a sub Saharan country located on the coast of West Africa within the Gulf of Guinea. The country comprises a population of 24,652,402 million people and covers a total area of 238,533 square kilometers, with a 539 km coastline.

Transportation of cargo and passengers through Ghana is mainly by road, air or sea since rail facilities are not so developed. The ports of Ghana currently handle over 17 million tons of cargo.

Ports and Shipping

Ghanaian ports are managed by the Ghana ports and Harbours authority which is the organization mandated to build and operate all ports in Ghana. Currently, there are two commercial ports: the port of Tema and Takoradi.

The port of Tema is the larger of the two ports. It was built in 1962 and handles 75% of the nation's seaborne traffic. The port is a multipurpose port with dedicated container handling facilities. Various forms of cargo, including containers, break bulk, dry and liquid bulk and conventional cargo are handled by the port. Container traffic increased from 306,863 TEU'S in 2003 to 840,183 in 2012. The port of Tema is being positioned to serve as the major logistics and container hub of the sub region. Consequently, it is being expanded to meet national traffic growth, transshipment and transit trade demands. The expansion plans comprise:

- Dredging of basin and access channel to 16m draft
- New Container Terminals
- New Food & Fruit Terminals
- New RoRo Terminal
- New Tran-shipment Terminals
- New Transit Terminal
- New Break bulk
- Dry and Liquid Bulk Terminals
- Additional access routes.

The cost of the project is 1.5 billion US dollars and financing will be done through Government Funding, Commercial Loans and Public Private Partnerships.

Takoradi which is the older port was opened in 1928. In 2012 the port handled 31% of Ghana's seaborne traffic, 66% of national exports and 19% of national imports. The port is multipurpose, but specializes in bulk traffic to and from Ghana. Takoradi port is currently undergoing expansion to position it as the oil services hub of the sub region. This includes a 1.15 km breakwater extension, dredging to 16 meters reclamation and paving, bulk handling terminals, construction and expansion of access roads. The total cost of the project is \$450,000,000 US dollars.

The ports, though state owned, are autonomous and run commercially with private sector participation. Though the port authority participates in stevedoring and shore handling, there are in addition 10 private stevedoring companies, two private shore handlers, five private inland clearance depots, three private waste reception companies, a private bunkering company and various private ship chandeliers and warehouse operators. Safety and security are facilitated by the port authority in collaboration with related national security agencies.

There are direct or transshipment shipping services from all continents of the world to and from the Ghanaian ports. In 2012 61 shipping lines and agencies accounted for the 11,468,962 tons of cargo which passed through the port of Tema.

DESCRIPTION	TEMA PORT	TAKORADI PORT	TOTAL
Cargo Traffic (TONNES)	11,468,962	5,310,697	16,779,659
Vessel Traffic (UNITS)	1,521	1,664	3,185
Import (TONNES)	9,383,462	2,353,068	11,736,530
Export (TONNES)	1,477,390	2,957,621	4,435,011
Container Traffic (TEU's)	824,238	60,746	884,984
Transit In (TONNES)	517,037	5,958	522,995
Transit Out (TONNES)	13,420	0	13,420

TRAFFIC HANDLED BY THE PORTS OF TEMA AND TAKORADI IN 2012

CARGO TRAFFIC BY COMMODITY PORTS OF TEMA AND TAKORADI

DESCRIPTION	TEMA	TAKORADI	TOTAL
LIQUID BULK	804,912	417,658	1,222,570
DRY BULK	2,385,823	4,151,818	6,537,641
CONVENTIONAL	1,976,368	288,261	2,264,629
CONTAINERISED	6,140,535	60,746	6,201,281
FROZEN CARGO	161,324	18,808	180,132
TOTAL	11,468,962	4,937,291	16,406,253

MARITIME SAFETY

There are two Harbour Masters to coordinate the marine affairs of both Ghanaian ports. The marine departments are responsible for running the fleet of marine crafts and navigational aids. The signal stations are equipped with GMDSS, AIS and ARPA systems for monitoring and surveillance of vessels within port limits there are seven (7) lighthouses. Both ports are ISPS compliant and operating at Marsec level 1. There are daily sea side patrols by port security in collaboration with naval and maritime police personnel.

ORGANIZATION AND HUMAN RESOURCES

The Ministry of Transport is responsible for all the related land, sea and air transport sectors. The following agencies operate under the Maritime Sub Sector.

Ghana Ports & Harbour Authority is mandated by law to plan, build, operate and manage all ports in Ghana. Its functions include licensing and regulating private service providers such as stevedores and container terminal operators, establishing pilotage districts, maintain the port facilities and extend and enlarge any such facilities as it shall deem fit, regulate the use of any port and of the port facilities; maintain and deepen as necessary the approaches to, and the navigable waters within and outside the limits of any port, and also maintain lighthouses and beacons and other navigational service and aids as appear to it to be necessary; and all activities necessary for the discharge of its functions. The authority employs a total of 2660 personnel 1538 in the port of Tema, 997 in port of Takoradi and 125 persons in the Ghana Ports and Harbours Authority (headquarters).

Volta Lake Transport Company Limited was set up to operate as public carrier of all forms of water borne transport, including hovercraft, for persons and/ or freight on the Volta Lake.

Regional Maritime University (RMU)

The RMU is an international tertiary institution which attained full university status on 25th October, 2007. The RMU which is jointly owned by five (5) member States namely; the Republics of Cameroon, the Gambia, Ghana, Liberia and Sierra Leone, is a product of the Regional Maritime Academy (RMA) which was established in May, 1983 to provide relevant maritime education and training to enhance the contribution of Maritime Transport to the socioeconomic development of both the RMU Member Stated and the West and Central African Subregion as a whole. Another objective is to further improve regional cooperation and integration of the sub-region. On 1st October, 1982, the Government of Ghana promulgated the Regional Maritime Law 1982 which allowed the transfer and handing over of the then Ghana Nautical College to the now Maritime Organization of West and Central Africa (MOWCA) which negotiated for the regionalization. The college was then re-named The RMA. The university offers the following courses:

- BSc. Nautical Science
- BSc. Marine Engineering
- BSC. Marine Electrical and Electronics Engineering
- BSc. Computer Engineering
- BSc. Port and Shipping Administration
- BSc. Logistics Management (in collaboration with Shanghai Maritime University, China)
- Deck Officers Certificate of Competences
- Engine Officers Certificate of Competences
- Electrical Officers Certificate of Competence



• All Ship based personnel courses.

Ghana Maritime Authority (GMA)

The GMA was established under the Ghana Shipping Act, 2003, (ACT 645), hitherto it was a Department in the Ministry of Transport. Its core responsibility is the implementation of the Act that established it in addition to but not limited to the following;

- Ensure safety of navigation
- Lead agency for Search and Rescue
- ${\boldsymbol \cdot}$ Pursue the ratification or accession and implementation of international maritime convention
- Advise the Government on maritime matters.

For effective fulfillment of its mandate the GMA has established the under listed division namely;

- General Maritime Services seafares' registration, training, examination and certification
- Technical Services Division surveys and inspection, environmental and safety standards, security, search and rescue, and hydrography and navigation
- Inland Waterways Division
- Administrative Division
- Planning, Monitoring and Evaluation Division
- Office of the Registrar of Ships

Number of Seafarers Officers – 2,764 Rating – 4,500 Greater numbers of the Seafarers ply their trade on foreign ships. Current Ghanaian Fleet (GRT) General Cargo – 6,714 Tanker – 5,842 Others – 619, 440 Total number of Registered Vessels – 430

Tema Shipyard & Drydock - responsible for ship repair and dry docking services

Ghana Shippers Authority

The then Ghana Shippers Council was established in 1974, was changed to Ghana Shippers Authority by virtue of the revised law, Act 562 (1998).

The Authority has over the years collaborated with private and public organizations in the maritime industry to pursue its primary objective of protecting and promoting the interests of Ghanaian shippers in relation to port, ship and inland transport problems in order to ensure safe, reliable and cost effective cargo handling.



KENYA

1. Country Overview	
Land area :	$580,367 \text{ km}^2$
Population :	44,037,656 (July 2013 est.)
Main industries :	Cement Industries
	Tea and Coffee industries
	Soft drink Industries (e.g Delmonde)
	Horticultural crops
	Soda Ash Industry
Main trading partners :	Tea : Egypt, Pakistan, U.K, Afghanistan and Sudan
	Coffee : Western Europe, North America, Africa and Middle East
	Soft drinks : Western Europe, Middle east and East African region
	Cement : East Africa region and Middle East
	Horticultural crops : Western Europe
	Soda Ash : Pakistan

2. Maritime Overview

 Kenya has a coastline that stretches 480 Km along the Indian Ocean from Somali in the north to Tanzania in the south. This coastline is endowed with one major port in the region, the Port of Mombasa, and other ten small ports. The potential of these small ports are limited because most of the development activities are concentrated along the LAPPSET Corridor which is served by the Port of Lamu and Mombasa-Nairobi corridor which is well served by the Port of Mombasa.



Figure 1 Map with port locations EAST AFRICA EAST COAST

Country Report



- GDP (official exchange rate) : \$41.12 billion (2012 est.)
- Seafarers-
- Naval architecture-None
- Dockyards- Sothern Engineering Co.Ltd and AMGECO both privately owned but dealing with small Vessels both have enhanced Mombasa as a port, and emphasized its importance as a vital ship repair centre
- GDP ratio against all industries -Ksh1:530 billion
- Source : CIA World Factbook

Kenya Shipping and Water Transport:

- BMI has a positive outlook for Kenya's ports and shipping sector based on three main factors:
 - \succ reasonable economic growth in Kenya itself;
 - > a dynamic East African region (this is important because Mombasa acts as a trade gateway for many of Kenya's neighbouring countries);
- > Political will to support initiatives meant to improve service delivery
- It is predicted that GDP growth of 5.2% 2013/2014. Our forecast has been strengthened by growth in construction and agriculture with only the tourism sector showing weakness.
- With a post-elections confidence boost still making itself felt, we believe that household consumption and both public and private investment will drive the economy forward over the next few quarters. Consumption is looking resilient, even though the new 16% VAT tax imposed on basic goods.
- President's focus on infrastructure should also boost public sector investment.
- The country's exports to its dynamic neighbours and fellow-members of the East African Community(EAC) are set to grow strongly, demand for consumer and capital goods will probably keep import growth higher and Shipping Sector is expected to benefit immensely.

(2) Main ports (cargo handling capacity, characteristics) including planned ports)

- i) Mombasa Port which handled a throughput of 21,920 million tones, 2012 with growth rate of 7.0% per year
 - Other KPA ports include Kiunga, Ngomeni, Malindi, Kilifi, Takaungu and Mtwapa, are in north coast whilst Shimoni, Funzi and Vanga are found in the South coast. Apart Port of Shimoni, the Customs Department of KRA is charged with the responsibility of collecting KPA's dues and cargo brought to these small ports are by dhows from within the Country.

Cargo Type	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Avg. Growth
IMP.	8,299	7,844	9,257	10,017	10,700	11,845	13,061	13,311	16,508	16,201	16,938	18,732	8.0%
EXP.	1,999	2,380	2,068	2,494	2,278	2,255	2,474	2,685	2,449	2,575	2,788	3,045	4.5%
T/Ship	303	340	605	409	303	318	426	419	105	158	227	143	-6.6%
GRAND TOTAL	10,601	10,564	11,931	12,920	13,281	14,419	15,962	16,415	19,062	18,934	19,953	21,920	7.0%

Table No 2 Throughput (000)DWT)-2001-2012

✤ The construction of Berth 20,21,& 22 by Japanese under the consultancy of JICA.

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The table also shows the projected volume of containers for the 3 berths build on 100 hectares at the western side of the existing Kipevu Oil Terminal ("KOT") to create an additional capacity of 1.2 million TEUs.

	Table NO 5. Projected capacity based on Port Development Plans							
Project	2012	2013	2015	2016	2020	2025	2030	TOTAL
Current	850							
Berth 19		200						200
2nd container				450				450
Phase 1					400			400
Phase 2			_			350	_	350
TOTAL	850	1,050	1,050	1,500	1,900	2,250	2,250	2,250

Table No 3: Projected capacity based on Port Development Plans

Proposed development of free port facilities on 3,000 acres of land owned by the Authority at Dongo Kundu area in Kwale County through public private partnership arrangement

Lamu Port South Sudan and Ethiopia Transport Corridor (LAPSSET)

(3) Fleets : Kenya Government does not own any fleet.

(4) Maritime policy

The Policy and development framework for the Port of Mombasa is anchored on the Vision 2030 and the National transport sector policy, Port Master Plan, Port Strategic Plan, Business Plan and other Government Documents that have set the policy frame work for reform of the transport sector

- The Government of Kenya has put in place systems and mechanism to boost the industry and maximize its potential to become a Maritime Nation in the region through enactment of relevant international treaties into the domestic legal frame work
- This has been possible by establishing Organizations that have effectively championed the Maritime Industry development of the nation to its current status. This includes;
- Kenya Ports Authority
- Kenya Maritime Authority

(5) Seafarer/maritime education and training institutions

(Name, number of graduates /year, year of establishment)

No	Item of Discussion	Figures	Remarks
1	Seafarers	6,000	Kenyan seafarers suffered a major setback when it was not white listed. The process saw many experienced seafarers loosing employment. GOK managed to develop a legal frame work that would allow fully implementation of STCW 95 under KMA and attained White List status in 2010. This number is per registration but active figure is yet to be established.
2	maritime education and training institutions	1	Bandari College . The college was established in 1980 to offer internal and refresher courses on safe handling of cargo and management courses.



(6) Foreign countries supporting/assisting in the maritime field

(eg.: country name, project name, description, year(s), size (amount \$) of grants/loans)

No	Country name	Project name	Description	Year(s)	Size (amount \$) of grants / loans
1	Japan	Construction of additional Terminal	Berths 20.21.22 Mombasa	20th Nov,2007	26.7Billion Japan Yen (STEP LOAN)
2	Europe	Port Improvement Programme	Mombasa Port	29th Nov, 2013 (46months)	Grant
3	United Arab Emirates	Technical Assistance for Port performance improvement	Mombasa Port	2012/2014	Grant
4	World Bank	Integrated Security System	Mombasa port	2012/2013	USD 4,885,200
5	Ref.Attactment				

(7) Relationship with Japan in the maritime field

- Japan has been offering Maritime support through JICA Agency in terms of Human Resource Development and technical services.
- The construction of Berth 20,21,& 22 by Japanese under the consultancy of JICA is on-going.

(8) Maritime organizations and WMU graduates distribution

No	Maritime Organization	WMU graduates
1	Kenya Ports Authority	21 (15 either have retired, passed away or resigned from Authority)
2	Kenya Maritime Authority	5
3	Kenya Ferry Services	1
4	Ministry of Transport	5 (estimate)
5	Marine Police	Nil

GOK MINISTRY ORGSTRUCTURE

1) Organizational charts : (Appendix submitted) which organization is the genuine focal point to IMO

GOK MINISTRY ORGSTRUCTURE





3) Selection process for WMU candidature

It is managed by Personnel department-Overseas Training unit verified/approved by Training Committee.

The Author of this summary report done by Mr Samwel Kiptoo



1. Country Overview

Land area : $111,369 \text{ km}^2$

Population : 4.19 million people according to the 2012 statistics

Main industries : Agriculture, Mining, Maritime, Oil industry and Manufacturing

Main trading partners : European Union, Malaysia, China, United States, and South Korea

Liberia is found in West Africa, between Cote d'Ivoire, Sierra Leone, and Guinea. It is a fertile country with unlimited mineral resources, water, forests and a favorable climate for agriculture. Being a country rich in waters, Liberia heavily relies on maritime resources as a revenue income. The Maritime resources being the biggest source of income in this country, Liberia has with time developed its infrastructure to help conform to the rising demand for transportation of goods.

2. Maritime Overview

Liberia has the second largest maritime registry in the whole world after Panama. The registry contributes greatly to the national GDP. The total amount of taxes and fees that the registry generates is \$18 million annually. This amounts to approximately 25% of the country's total revenues (Schoen, nbcnews.com).

The Liberian maritime registry has over 3900 ships of at least 130 million gross tons. This figure represents approximately 11% of the global fleets in the ocean. It is famous for quality service, effectiveness as well as safety.

Similarly, it is known for being at the top of all industry lists counting the International Maritime Organization and the main port state control bodies like the United States Coast Guard, as well as Tokyo and Paris MOU regimes. Additionally, according to the United States maritime administration, its flagged ships ferry more than 33% of oil imported in the US (Christian). The registry is managed by the Liberian ship and corporate registry, which is a wholly United States owned as well as operated firm that offers the daily management of the nation's ship as well as corporate registry. The Liberian registry is recognized worldwide for its commitment and professionalism in secure shipping and its efficient management of one of the most suitable, proficient, as well as tax convenient registries in the world. Its personnel are committed to providing a quality service when it comes to managing the registry. The registry is headquartered in Virginia and has many offices around the globe.

Its fleet comprises practically every kind of ship, with huge concentrations of chemical, oil as well as gas tankers, trailed closely by both containerships and dry bulk carriers. It is clear that the registry has experience with distinct purpose vessels as well as huge passenger ships. The owners of such fleets come from more than 55 nations, with Greece, Germany, Taiwan, Russia, United States and United Kingdom featuring prominently. A new office which was recently opened in Hamburg affirms to Germany's maritime significance. It is approximated that 60% of

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all global ship finance comes from the German market. As at now, the Liberian registry has more than 55 clients, 420 ships as well as 11 million gross tons that are managed from Germany alone (Christian).

3. Registration Fees and Charges

The success of the Liberian registry can also be attributed to its 2 day registration process which is free of bureaucracy. Where a vessel is to be registered when transferred from overseas, or new-building, the registration fees as well as the tonnage taxes in the first year and the annual fees are paid before registration. Tonnage taxes per year become due in full on 1st January of a certain year. When the ownership of a ship is meant to be transferred shortly following the beginning of a calendar year, the purchaser and the seller ought to take specific care to offer payment of the relevant taxes. On 1st July, 2000, the registry lowered its tonnage taxes and fees and now offers two pricing alternatives. For ships weighing at least 14,000 net tons, the tonnage taxes are \$0.1/net ton as well as a flat yearly fee of \$3800/vessel. Separate fees for MIIPS contributions and inspections exist to cover the International Maritime Organization, as well as marine investigations. However, for ships that weigh less than 14000 net tons, the tonnage taxes are \$0.4/net ton as well as \$1750 inspection charges and MIIPS charges (Jeffrey).

4. Liberian Maritime Services

(1) Vessel registration department

The registry is normally open to all ship owners, and it registers all vessels as long as they meet its standards. The registration formalities are designed to be user friendly, meet international standards when it comes to safety as well as to safeguard the interest buyers/ owners. All vessels are required to be less than 20 years old and must meet the standards of the registry.

(2) Maritime security

Commercial ships, as well as their crew, are not only targeted by piracy, hostage taking and robbery, but also targeted by terrorist attacks. The registry of Liberia believes that complying with the code of International Ship and Port Security (ISPS), drastically lowers the attacks and crimes against ships and their crews. That is why it works with its clients to establish vessel security procedures such as development of ISPS compliance codes, implementation of quality management practices and setting as well as communicating security threats to Liberian vessels. (3) Maritime safety

The registry of Liberia is recognized as an industry leader when it comes to safety and quality. Having more than 3,900 vessels globally, the average age of the fleet is one of the youngest in the world; an average of 12 years. The young fleet age is a major contributing factor to safety standards of the Liberian registry. The marine safety is mainly charged with the responsibilities such as approving ship plans, verifying security implementation plans and safety management systems, responding to issues about the ISM code as well as ensuring that there is minimum manning needed, and so on(LMA).

(4) Vessel Inspection and Audit Coordination

The registry has provided training to its own auditors to perform company as well as

certification and verification as necessitated by the ISPS and ISM code. The auditors carry out numerous ISPS code approval as well as certification of tasks for the fleet, giving owners/ operators professionalism in service provision. By coordinating the overlapping necessities of the international codes, the registry offers vessel owners efficient, convenient as well as costeffective services. Following the registry's success in ISPS approval, certification and verification, as well as harmonized audit packages, a quality audit department was created to maintain and administer the operation.

4. Main ports

The National Port Authority (NPA) of Liberia manages four ports, namely, the Freeport of Monrovia, the Port of Buchanan, the Port of Harper and the Port of Greenville.

The Freeport of Monrovia is a small harbor, over 500 feet long, maximum vessel size over 150 m long. It is the largest in the Authority's Network. The United States Military built the port during World War II for strategic purposes. It handles most of the country's imported cargoes. Two breakwaters, 2,359m and 2,200m long, protect the harbour, enclosing a basin of 300 hectares of protected water. The general cargo berth, (the main pier), consists of an opened piled, 610m long by 11m wide marginal wharf with a reinforced concrete deck.

The main wharf serves 2nd and 3rd generation coastal and mainline vessel. An act of Legislature established the National Port Authority in 1967 (amended in 1970) as a stateowned enterprise to manage, plan and develop all ports in Liberia.

- 2. The Port of Buchanan is a small harbor, maximum vessel size over 150 m long, anchorage depth of 21m. It is located 170miles South-east of Monrovia. The Liberia-American Swedish Company (LAMCO), a joint venture company, constructed the port in 1960 for the export of iron ore deposits of the Nimba Range. Two break waters, 1,890m and 590m long to protect the harbour. Inside the basin, a 225m long ore-loading quay is located to the deeper section of the harbour basin with a water depth of 12.95m below chart datum. Adjacent to the loading quay, a waiting berth for ore carrier is available. On the inner side of the secondary breakwater, a commercial quay 334m long is located with an available water depth of 10.15m below chart datum. The access channel to the port provides ship a water depth of 14.95m below chart datum and a channel width between the breakwaters of 210m.
- 3. The Port of Cape Palmas/Harper is a small harbor, vessel size small up to 150 m, anchorage depth 11m. It is situated in the South-eastern region of Liberia, Maryland County, near the border with the Ivory Coast, about 476 miles from the Freeport of Monrovia. The Port was constructed in 1959, on the rocky Russwurn Island, by connecting the island to the mainland with a causeway and by constructing a 150m long breakwater off the Russwurn Island. A 100m long reinforced concrete pier with an available water depth of 5.50m provides berthing facilities. The port serves the timber industry of the South-eastern hinterland.
- 4. The Port of Greenville is a very small, medium vessel size up to 150 m long, anchorage depth 14 m. It is also located in the South-eastern region of the country, Sinoe County, about 421 miles from the Freeport of Monrovia. A 400m long breakwater protects the harbour. There are two quays (70m and 180m long respectively) on the inner side of the breakwater for berthing facilities, with an existing water depth of 6m below chart datum. The port was rehabilatated



in the early eighties with loan from the German Development Fund. The port functions mainly as an outlet for the timber industry. Approximately 3900 ships are registered by the registry to ferry cargo, oil, and people.

5. Maritime policy

All ports are registered under the National Port Authority of the Liberian government. The registry is located in the United States and its mandate is to manage all ships that possess the Liberian flagship.

Owners of vessels below 500 tons should register them under the Liberian Maritime Authority. Such vessels include speedboats and canoes, among others. The Liberian Maritime Authority has the mandate of inspecting all registered vessels. The maritime laws state that any vessel that operates within the Liberian maritime territory without permission should pay a certain amount of money as penalty.

6. Seafarer/maritime education and training institutions

The Liberia Maritime Authority provides scholarship programs. The program has benefited over 300 students from the World Maritime University (WMU), the Liberia Maritime Training Institute (LMTI), the University of Liberia, Cuttington University College, and maritime institutions in the United States (California Maritime Academy, Maine Maritime Academy and Massachusetts Maritime Academy).

7. Foreign countries supporting/assisting in the maritime field

The United States is the key contributor to the success of the Liberian Maritime. The US owns the Liberian International Ship & Corporate Registry. Its headquarters are in Virginia, USA (Sharife). The company has served Liberia ever since the inception of the registry. It spends over \$10 million annually to run its businesses in designated countries across the world.

8. Relationship with Japan in maritime field

There are strong economic and technical relationships between Japan and Liberia. The economic relationship steers from Japan's experience in maritime affairs such as fishing. Liberia therefore is a beneficiary of Japan in fishing eloquence. Technically, Japan works together with Liberia on the best ways of ship and port maintenance.

9. Maritime organizations and World Maritime University (WMU) graduate distribution

The organization that is the genuine focal point to International Maritime Organization (IMO) is the Liberia Maritime Authority. The World Maritime University churns out at least two doctoral students per year.



Organizational Structure of Liberia Maritime Authority (LMA)

The Commissioner is the head of Liberian maritime authority. It is organized into a functional basis that is in line with its current growth strategy. The Bureau of Maritime Affairs was changed into the Liberian maritime authority in 2010, therefore, strengthening the country's resolution to further commercialize its maritime resources.

(1) Corporate Strategy and Industry Development

Responsible for enhancing the effectiveness by setting up suitable strategies as well as creating attractive business programs intended to foster growth.

(2) Finance

Responsible for planning, direction, organization as well as management of workers involved in implementing, developing as well as maintaining policies for the budget control, payroll, fixed assets, etc.

(3) General Counsel

This department conducts legal analyses on many issues under the guidance of the commissioner such as research relevant precedents, identifying legal issues and proposing

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suitable solutions.

(4) Administration

Its main role is the overall management of all the services provided by the maritime. The administrative roles include archives, transportation, records and documentation as well as facilities management sections, etc.

(5) Maritime Safety and Environmental Protection

The maritime authority ensures that the environment is not damaged as per the Safety of Life Sea (SOLA). It ensures that there is adherence to regulations as well as policies concerning environmental protection (Jackson).

10. Selection process for WMU candidature

Application is open for any person who is willing to undertake studies in maritime courses. The application should not be through the International Maritime Organization because it does not deal with admissions. The applications are then reviewed by the WMU admissions Board (World Maritime University). The selection is based on merit criteria and the ability of the students to submit the fee requirements on time.

In Liberia, the Liberia Maritime Authority nominates a candidate for enrollment at WMU. After a candidate is academically cleared and selected by WMU, then the funding aspect follows.

This report was prepared by Amos L. Zanwonjah, World Maritime University (WMU) Sasakawa Fellow of Liberia (Port Management Class of 2000) and former Assistant Commissioner for Training and International Affairs, Vienna, Virginia, USA. Presently, Mr. Zanwonjah is managing an Environmental Organization in the United States.

Works Cited

- Sharife, Khadija. *Flying a Questionable Flag: Liberia's Lucrative Shipping Industry*. Accessed November 14, 2013 at http://muse.jhu.edu/journals/world_policy_journal/summary/v027/27.4.sharife.html
- Schoen, John. *Liberian Shipping Draws Scrutiny*. Accessed November 14, 2013 at http://www.nbcnews.com/id/3072983/#.UoQq8H9Y79k
- World Maritime University. Apply. Accessed November 14, 2013 at http://wmu.se/apply-wmu
- Christian, Davidson. *Liberia at the Top of the Registry*. 2011, Web. Retrieved on 16th September, 2013. Retrieved at http://www.itfseafarers.org/liberia.cfm,
- Jackson, Brauger. *Liberian Registry*: Maritime Services. 2012, Web. Retrieved on 16th, September 2013. Retrieved at http://www.liscr.com/liscr/maritime/tabid/60/default.aspx#mlc
- Jeffrey, Blackman. *Liberia: Offshore Business Sectors.* 2013, Web. Retrieved on 16th September, 2013. Retrieved at http://www.lowtax.net/lowtax/html/liberia/jlaobs.html
- *Liberian Maritime Authority Website* (LMA). 2013, Web. Retrieved on 16th September, 2013. Retrieved at http://maritimeliberia.com/?services/certification/flag.html
- Accessed Novemberr 14, 2013, at http://npa.gov.lr/main.html

National Port Authority: Accessed November 14, 2013, at http://npa.gov.lr/main.html


MADAGASCAR

Country Overview
Land area : 587,041 km ² (5,000 Km (Coastline), 253 (Islands))
Population : 22,585,517 (Median age: 18.2 years, July 2011 estimation)
Main industries : 1) Agriculture and fisheries
2) Services
3) Transports (Land, air, Maritime)
4) Factories
5) Mining
Main trading partners : France (26.3%), USA (9.2%), China (8.5%), Netherlands (6.4%),
Germany (5.6%), Canada (4.4%) and Spain (4.3%)

2. Maritime Overview

- a. Maritime industry (Shipping and water transportation, ports and harbours, seafarers, and naval architecture/dockyards) GDP total, GDP ratio against all industries, characteristics)
 - Shipping and water transportation: Mainly with traditional and second handed vessels for the domestic shipping and water transportation, very few vessels operating on international voyage, transports of goods for import and export mainly ensured by foreign vessels belonging to international shipping companies such as MAERSK, CMA-CGM, etc.
 - Ports and harbours: 17 ports (11 Domestic ports and 06 international ports)
 - Seafarers: 4107 (Around 50% work in international seafaring)
 - Naval architecture/dockyards: 01 shipping yard (Located in Antsiranana), 01 dockyard (Located in Port of Toamasina)
- b. Main ports (name, cargo handling capacity, characteristics) including planned ports

				PORT INI	RASTR	UCTURE				
	BERTH LE	NGTH (m)		DRAI	FT (m)		REEFER	WAREHOUSE	MOORING I	LATFORM
	INTERNATIONAL SHIPPING	DOMESTIC SHIPPING			WATER SIDE	- YARD (m²)	(m ²)	(m ²)	NUMBER	DRAFT (m)
	301	62	51	8.50	14	6 602	2 830	6 274	04	8 à 14
	PORT SERVICES									
PORT OF ANTSIRANANA	SERVICES	NAME OF PO COMPANY		POSTAL AI	DRESS	PHONE		FAX	МА	IL
	PILOTAGE	SMOI		P.O. Box 31	Box 3160 + 261 20 22 Antananarivo		43 87 26	1 20 22 215 82	Smoi.mar@wanadoo.m g	
		CMDMD		P.O. Box 5 201 Antsiranana		+ 261 20 82 226 06 26		1 20 82 293 89		
	CARGO HANDLING	COMADIE		P.O. Box 205 201 Antsirana		261 20 82 233	33 26	61 20 82 226 06	Comadie@dts.mg	
		SG TPSM 10		01 Antsirana	na	261 20 82 233 33		61 20 82 233 33	sgtpsm@wanadoo.mg	
			(CARGO HA!	NDLING	CAPACITY				
		CMDMD						COMADIE		
	24	Tons/Hour/	Геат				31 7	fons/Hour/Tear	n	
	9 Co	ntainers/Hou	r/ Team				8 Con	tainers/Hour/Te	eam	



		PORT INFRASTRUCTURE										
	BERTH LENGTI	I (m)	DRAFT (m)		YARD (m ²)		REEFER			MOORING	PLATFORM	
	INTERNATIONAL DOMESTIC SHIPPING SHIPPING BERTH WATERSIDE	YARD ((m*)	(m ²)	WAREHOUSE (m ²)	NU	MBER	DRAFT (m)				
	-	819	4.50	12	16 935			20 060	20 060		3 à 12	
		PORT SERVICES										
	SERVICES	NAME OF COMPANY	POSTAL ADDR		ESS	PHONE		FAX		MAIL		
PORT OF MAHAJANGA	PILOTAGE	SMOI		Box 3160 Antananarivo		+ 261 20 22 243 87		+ 261 20 22 215 82		Smoi.mar@wanadoo.mg		
	CARGO HANDLING	СОМАМА		13, Jules Ferry Street401 Mahajanga		+ 261 20 62 242 78		8 + 261 20 62 24	+ 261 20 62 242 79		@malagasy.com	
		SEMS		Box 1244 Mahajanga			20 62 228 76	6 + 261 20 62 29	3 20			
				CARGO HA	ANDLING	G CAP	PACITY					
		COMAMA						SEMS				
	35	Tons/Hour/Team	1									
	14 Co	ntainers/Hour/Te	am									

				POR	T INFRASTR	UCTURE					
	BERTH LENGTH (BERTH LENGTH (m) DR.				REEFER	WAREHOU	JSE C	CEREAL SILO	CEMENT SILO	
		OMESTIC HIPPING	BERTH	WATER SIDE	YARD (m ²)	(m²)	(m ²)		(T)	(T)	
	706	314	12	14	870 000	-	- 53 020		25 000	20 000	
					PORT SERVIC	ES					
	SERVICES		ME OF APANY	POST	TAL ADDRESS	PHON	E	FAX	I	MAIL	
PORT OF TOAMASINA	PILOTAGE	s	PAT	Ampas	iilaho Boulevard, simazava East pamasina.	+ 261 20 53 321 55 + 261 20 53 321 56			spat@port-1	spat@port-toamasina.com	
	CARGO HANDLING	CONTAINER : MICTSL		Ampas	mmerce Street, simazava pamasina	+ 261 20 53 352 04 + 261 20 53 352 05			info@ictsi.mg		
			ENTIONAL O : SMMC	Ampas	l Be Street simazava pamasina	+ 261 20 53 3	+ 261 20 53 312 63		contact@smmc.mg		
		I		CARC	GO HANDLING O	CAPACITY					
		MICTSL						SM	IMC		
	38	3 Containe	ontainers/Hour/ Team						-		

Mooring Platform : 4 (11 m, 15 m, 16 m, 20 m of draft)

				PORT IN	IFRASTRU	JCTURE					
	BERTH LENGTH (m) DRAFT			AFT (m)	NARR (R	REEFER	WAREHOUSE	MOORI	MOORING PLATFORM		
	INTERNATIONA SHIPPING	L DOMESTIC SHIPPING	BERTH	WATERSIDE	YARD (m²)	(m²)	(m ²)	NUMBER	DRAFT (m)		
	169	144	8	14	23 500		8 945	02	8.5 à 14		
	PORT SERVICES										
PORT OF TOLIARY	SERVICES	NAME OF COMPANY	POSTAL ADDRESS		5 рно	ONE	FAX		MAIL		
	PILOTAGE	SMOI	P.O. Box 3160 101 Antananarivo		+ 261 20	22 243 87	+ 261 20 22 215	82 Smoi.r	Smoi.mar@wanadoo.mg		
	CARGO	SEMS		ox 1244 ahajanga	+ 261 20	62 228 76	+ 261 20 62 293	20			
	HANDLING	СОМАТО	P.O. B 601 To	ox 460 liary	+ 261 20	20 94 410 31 + 261 20 94 41		87 comato@wanadoo.mg			
	CARGO HANDLING CAPACITY										
		SEMS					COMA	го			
		73 Containers/Hour/Team				60 Tons/Hour/team					
	7 Containers/Hour/Team					8 Containers/Hour/Team					



				PORT INF	RASTE	RUCT	URE					
	BERTH LENG	TH (m)	DR	AFT (m)					MOORING PLATFORM			
	INTERNATIONAL SHIPPING	DOMESTIC SHIPPING	BERTH	WATERSIDE	YARD (m²)		REEFER (m²)	WAREHOUSE (m²)	NUMBER	DRAFT (m)		
	Anchorage waterside	150	5	14	11 250			3 259	-	-		
	PORT SERVICES											
PORT OF NOSY BE	SERVICES	NAME O COMPA	-	POSTAL ADDRESS		PHONE		FAX]	MAIL		
	PILOTAGE	-		-			-	-				
	CARGO HANDLING	SAMM	1	+ 261 20 86 613 69				samm@dts.mg				
	CARGO HANDLING CAPACITY											
	SAMM											
	14 Tons/Hour/Team											
	5 Containers/Hour/Team											

	PORT INFRASTRUCTURE										
	BERT	H LENGTH (m)		DRAFT (m)							
	MAIN BERTH Nº1	SECONDARY BERTH Nº2	SECONDAR Y BERTH N°3	BERTH Nº1	BERTH N°2	BERTH N°3	— YARD (m²)	WAREHOU: Nº1 (m²)	SE WAREHOUSE N°2 (m²)		
	275	150	75	15,75	8	8	6 565	1 000	1 000		
PORT OF EHOALA	SERVICES	PORT SERVICES SERVICES NAME OF COMPANY POSTAL ADDRESS PHONE FAX MAIL									
	PILOTAGE CARGO HANDLING	PORT OF EHO	ALA Ltd	P.O Box 240 614 Fort Dauphin			+ 261 0 34 65 1	36 59	Patrick.Guillou@riotinto.com		
	CARGO HANDLING CAPACITY										
	19 Containers/Hour/Team										

3. Fleets

- cargo ship: 143 (Domestic : 140, Ocean-going category of ships of 500GT or more: 03)
- Ferry, Passenger ships: 67 (Less than 24 m or less than 20 GT: 67; 24 m or more or above 20 GT: 00)

4. Maritime policy

- Safety and security of maritime activities
- Protection of marine environment
- Protection of marine resources and activities against unlawful acts (Illegal fishing, Drug trafficking, Maritime Piracy and armed robbery against ships)
- Human resources capacity building

5. Seafarer/maritime education and training institutions:

- Name: Ecole Nationale d'Enseignement Maritime (Mahajanga)
- Year of establishment: 1963
- Number of graduates/year: Officer Courses (Deck & Engineering): 14; Professional

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Development Courses (Basic Maritime Course, Basic safety, Bridge Team Management, GMDSS, PFSO, etc.): 1,300

COUNTRY NAME/ INSTITUTION	PROJECT NAME	DESCRIPTION	YEAR (S)	AMOUNT OF GRANTS/ LOANS (USD)
African Bank of Development	_	Support of the fishermen community of Toliary	6 (2006 -2012)	9,360,000.00
France	CMG 1172 01 N	Restoration of Morondava Port	7 (2003-2010)	7,766,837.96
	CMG 6001 01 J	Restoration of Antsiranana Port	5 (2005-2010)	18,451,575,62.00
	CMG 1167 01 T	Supporting sustainable management shrimp resources and fishing	9 (2001-2010)	8,099,576.26
European Union	9165/MAG-9 ACP MAG 007	Facilitation of technical co-operation	5 (2004-2009)	5,000,000.00

6. Foreign countries supporting/assisting in the maritime field:

7. Relationship with Japan in the maritime field

(economic cooperation in recent years, technical cooperation, if any)

There is no official co-operation with Japan in the maritime field. However, there was once a Port Management Fellowship offered by Japan under the JICA project for one mid-level personnel from the maritime and port authority.

8. Maritime organizations and WMU graduates distribution

a. Organizational charts:



Country Report



b. Number of WMU graduates in each organization:

 Ministry of Transports: APMF (Port, Maritime and Waterways Agency): 03 WMU graduates (One of whom is a Sasakawa Fellow), ENEM (National Institute of Nautical Studies): 01 WMU graduate

c. Selection process for WMU candidature:

A call for application is organized by the APMF and the candidate with the highest TOEFL score fulfilling the academic requirements is the one presented by the APMF to WMU.

Author of this summary report Mr. Jean Edmond Randrianantenaina (2010)

Ocean governance and maritime transport in Madagascar

Situated between 11° 57' S and 25° 30'S of latitudes and between 043° 14'E and 50° 27'E of longitudes, Madagascar is an island located in the southern hemisphere in the Indian Ocean. It is the fourth biggest island in the world with a size of 587,041 square kilometers and a population of 22,585,517¹ composed by eighteen ethnic groups. As an island, it is obvious that the sea plays an important role in the tradition of the population and the economy of the country. It is in this regard that it is interesting to look at how the ocean is managed in Madagascar and particularly how is the current situation of the maritime transport.

I. OCEAN GOVERNANCE :

As an inland, ocean management is of capital importance for Madagascar. It is party to the major maritime conventions and has incorporated in its national legislation the main provisions contained therein. It has put in place also the necessary organization. However, still having the burden of the colonization heritage, ocean governance in Madagascar is similar to the French administration which is more or less a continental administration of the ocean.

1) Major international maritime conventions ratified:

Madagascar is party to the major international maritime conventions. Among those which are ratified, the United Nations Convention on the Law of the Sea (UNCLOS) is an important one as well as those related to the maritime safety produced by the International Maritime Organization (IMO). The following table summarizes the major international conventions to which Madagascar is party to:

Depository organization or government	Maritime conventions to which Madagascar is a party
United Nations (UN)	UNCLOS and the Agreement relating to the implementation of Part XI of the Convention
International Maritime Organization (IMO)	IMO Convention 48 and 93 amendments, SOLAS 1974 (with ISPS code and ISM code), FAL 65, Load Lines 66, MARPOL 73/78, STCW 78 and 95 amendments, SUA 1988 and 2005 Protocol, OPRC 90, CLC 92, FUND, Djibouti Code of Conduct

1 July 2011 estimation



Depository organization or government	Maritime conventions to which Madagascar is a party
International Labor Organization (ILO)	C185 (Seafarer's Identification Documents),
	International Convention for the Unification of Certain Rules of Law relating to Bills of Lading (Hague-Visby Rules)

2) Maritime space:

In reference to the UNCLOS and its application into the Malagasy Maritime Code, Madagascar claims the following maritime zones as under its jurisdiction and its responsibility:

	Claim	Length, surface, number	Comments
Coastline		5,000 km	
Territorial Sea	12 nm	111,120 sq km	
Contiguous Zone	24 nm		
Exclusive Economic Zone	200 nm	1,140,000 sq km	It is an estimation as the maritime boundary delimitation between Madagascar and its neighboring countries are not yet negotiated except with the Reunion Island (France)
Continental shelf	200 nm or 100 nm from the 2,500 isobaths		Information on the limits of the continental shelf beyond 200 nm from the baselines from which the territorial sea is measured submitted on 29th April 2011 to the Commission on the Limits of Continental Shelf
Search and Rescue Region under its responsibility		4 million sq km	
Islands under its sovereignty	Claim pending over Bassas da India, Europa, Juan de Nova, Glorious island, Tromelin island and Geyser Banc (Known as the "Eparses Islands")	253	For the moment, although the "Eparses Islands" are administered by France, the dispute of sovereignty over these islands is still on.

3) Organization in ocean governance :

In term of ocean governance, the organization in Madagascar is quite similar to the French organization as the country adopted the French system following the colonization even after the independence from France. Hence, the responsibilities over the various domain of the ocean are allocated to different ministries as shown in the following table:

Administration	Area of responsibility in the maritime field	Operational and technical branch
Ministry of Transports	Maritime transport (Ports and Merchant Navy)	Ports, Maritime and Waterways Agency known as "APMF"

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Administration	Area of responsibility in the maritime field	Operational and technical branch
Ministry of Environment	Marine environmental protection	Oil pollution organ known as "OLEP" National Office of Environment known as the "ONE"
Ministry of Armed Forces	Maritime sovereignty and maritime security	Malagasy Naval Forces Malagasy Air Forces
Ministry of Land Settlement	Hydrographic survey	National Hydrographic Institute known as "FTM"
Ministry of Higher Education and Scientific Research	Marine scientific research	National Centre of Oceanographic Research known as "CNRO" Marine Biology Research Institute known as "IHSM" National Centre of Environmental Research known as "CNRE"
Ministry of Mines	Management of the mineral resources (Oil, gaz, etc.)	Madagascar Office of Mining and Strategic Industries known as "OMNIS"
Ministry of Fisheries and Aquaculture	Fisheries and aquaculture management	Fisheries Surveillance Centre known as "CSP" Malagasy Fishing and Aquaculture Agency know as "AMPA"
State Secretariat of Gendarmerie	Ports and waterways security	Nautical brigade

4) Maritime issues:

There are several issues that need to be addressed and solved in Madagascar in the maritime field.

The first issue is regarding the maritime boundary delimitation between Madagascar and its neighboring countries. However, this issue is dependent to the resolution of the claim of sovereignty over the "Eparses Islands" between Madagascar and France. Indeed, the settlement of this dispute will clarify the rights of Madagascar in terms of maritime zones size and will ease the delimitation of maritime boundary between Madagascar and its neighboring countries. Addressing this issue needs nevertheless a political will from the government of Madagascar and France as well as the existence of expertise from the technical, the legal and the foreign affairs people in Madagascar.

The second issue is regarding maritime policy and organization in ocean governance. In fact, as the responsibilities in the maritime field are scattered in various administrations without any national coordination, there is a lack of interagency coordination and collaboration. Thus, there is a need to put in place an organizational structure which will be in charge of coordinating the actions of all departments of the administrations involved in the maritime issues in Madagascar. There is also a need for establishing a national maritime policy which does not exist for the



moment.

The third issue is regarding the improvement of the operational capabilities in the field of maritime surveillance in order to protect the marine resources and the maritime transport, and to ensure a better response in search and rescue as well as in marine environmental protection.

II. MARITIME TRANSPORT:

Being an island State, maritime transport plays an important role in Madagascar either domestically or internationally. In one hand, due to the deficiency of the road infrastructure, domestic maritime transport is the solution for remote coastal areas to get replenishment and to transport local products. In the other hand, international maritime transport is the main way of importing and exporting goods.

1) Shipping :

In domestic shipping, there are several small shipping companies in Madagascar. Those shipping companies are usually owned by individuals that are selling goods in remote coastal areas which are very hard to access by road. Ships serving those areas are very often transporting at the same time passengers and goods. In 2012, domestic shipping counted 664 ships which represent around 23,234.41 DWT.

International shipping ensures almost 100% of the transport of imported and exported goods. Based on the estimation of 2011, the total exports value amounted USD 1.407 billion. The main exports commodities are coffee, vanilla, shellfish, sugar, clothing and chromites. The major exports destinations are France (26.3%), USA (9.2%), China (8.5%), Netherlands (6.4%), Germany (5.6%), Canada (4.4%), and Spain (4.3%). In terms of imports, the total value amounted USD 3.653 in 2011. The main imports commodities are capital goods, petroleum, consumer goods, and food. The imported goods are mainly from China (14.6%), France (11.4%), South Africa (6.4%), India (5.4%), Bahrain (4.6%), USA (4.3%), and Singapore (4.1%). Madagascar does not have national flagged vessels that operate on international long distance shipping activities. It is mainly ensured by foreign flagged ships belonging to international companies such as MAERSK Line, CMA-CGM, MSC, etc. However, to ensure sea transportation between Madagascar and its neighboring countries such as Comoros, Mauritius and Reunion Island (France), there are 18 ships which represent 5,052.66 DWT in 2012.

2) Ports :

Ports in Madagascar are classified into two categories namely ports of national interest and ports of regional interest. Generally, ports of national interest are those which are international ports and those of regional interest are domestic ports. With regards to port management, ports in Madagascar are classified into autonomous ports and non autonomous ports. Autonomous ports are established as a private company and function as such whereas non autonomous ports are either managed privately through global concession or managed by the State through the Agence Portuaire, Maritime et Fluviale known as the "APMF" (Port, Maritime and Waterways Agency).

At the moment, there are 17 ports in Madagascar. 6 of the 17 ports are opened to international trade and the remaining 11 ports are only for domestic trade. The volume of traffic within the international ports was estimated at 3,987,337 tons during 2012 whereas the cargo handling in domestic ports was around 1,337,927 tons.



3) Maritime safety and security :

In 2012, there were 18 cases of marine incidents. However, only one marine incident resulted in one loss of human life during that year. Compared to the previous years, there was a significant progress on this issue. The main causes of marine accidents in Madagascar are often related to overload of goods on board, human errors and substandard ships.

The Agence Portuaire, Maritime et Fluviale-APMF (Port, Maritime and Waterways Agency) is the administration in charge of maritime safety. To maintain maritime safety, the APMF is organized in one general directorate located in the capital city of Madagascar (Antananarivo), four regional directorates and twelve maritime sectors. The head of the regional directorates and the maritime sectors act as marine inspectors in the coastal areas under their responsibility. At sea, the APMF works in collaboration with the Malagasy Navy to ensure the enforcement of maritime safety regulations while the merchant ships are underway. In terms of aids to navigation, Madagascar has 25 major lighthouses to ensure coastal approach and the entrance of ports.

To ensure the training of seafarers (For the Merchant Navy and the fishing activities), Madagascar has one maritime institute.

In field of maritime security, the APMF is in charge of the ISPS Code implementation in ports and on board ships flying Malagasy flag operating internationally. As maritime piracy and armed robbery against ships remain permanent threats of maritime transport in Madagascar, the Ministry of Transports through the APMF and Ministry of Defense through the Malagasy Navy work together to respond to any incident.

The main challenges of Madagascar in maritime safety and security are the lack of qualified human resources to conduct the marine inspections, the absence of means to ensure the maritime domain awareness, and insufficient operational capabilities to guarantee the intervention at sea in case of incidents and to ensure maritime surveillance.

4) Maritime transport administration :

The Ministry of Transports is the Malagasy administration in charge of maritime transport. It is in charge of proposing to the government the national policy on maritime transport and has responsibility to implement it once it is adopted. To fulfill its obligations, the Ministry of Transports has a General Directorate in charge of Maritime, Waterways and Air Transports, a Directorate of Maritime and Waterways Transports, an agency acting as Port, Maritime and Waterways authority (The APMF), and a maritime institute.

a) General Directorate of Maritime, Waterways and Air Transports (DGTMFA):

The General Directorate of Maritime, Waterways and Air Transports known as the "DGTMFA" (Direction Générale des Transports Maritime, Fluvial et Aérien) is one of the general directorates under the Ministry of Transports. It is responsible for the supervision of all activities related to maritime, waterways and air transportation. It is in charge of the preparation and the drafting of the policy formulation in these three sectors for the Minister of Transports. It has as executive and operational branches under its direct supervision the Directorate of Maritime and Waterways Transports, the Port, Maritime and Waterways Agency and the National Institute of Nautical Studies.

b) Directorate of Maritime and Waterways Transports (DTMF):

The Directorate of Maritime and Waterways Transports or DTMFA (Direction des

SOPRF

Transports Maritime et Fluvial) works for the DGTMFA and it is part of the Ministry of Transports structure. It is the technical service of the Ministry of Transports in planning and policy formulation for the maritime and waterways transportation.

c) Port, Maritime and Waterways Agency (APMF):

The Port, Maritime and Waterways Agency or APMF (Agence Portuaire, Maritime et Fluviale) is an autonomous agency under the supervision of the Ministry of Transports (Technical supervision) and the Ministry of Finance and Budget (Financial supervision). It is an agency created in 2003 and has an administrative as well as a financial autonomy. It is governed by a board of governors (composed by representatives from the Public and Private sectors) and an executive branch (Represented by the General Directorate of the APMF). The APMF main mission is to implement the national policy on port, maritime and waterways transportation. In this regard, it is the port, maritime and waterways administrative authority in Madagascar. To carry out its duties, the APMF consists of one (01) General Directorate and four (04) Regional Directorates.

- The General Directorate of the APMF is located in Antananarivo, the capital city of Madagascar. The General Directorate is the headquarter or the head office of the APMF. It has three (03) Directorates and five (05) Divisions. The Directorates are the Regulation Directorate (In charge of Ports activities supervision and seafarer administration), the Safety and Technical Directorate (In charge of maritime safety, ports and aids to navigation infrastructure), Administrative and Finance Directorate (In charge of general affairs, finance and logistics). The divisions are directly under the supervision of the Director General of the APMF and they are the Legal Division, the Human Resources Division, the Information System and Telecommunication Division, and the Research and Development Division.
- The Regional Directorates represents the APMF in the maritime region. Actually, there are four (04) Regional Directorates which are located in Antsiranana (In charge of the northern part of Madagascar), Toamasina (In charge of the eastern part of Madagascar), Toliary (In charge of the southern part of Madagascar and the Mozambique channel), and Mahajanga (In charge of the north-western part of Madagascar).

The total number of employee of the APMF is 153 at present time.

d) National Institute of Nautical Studies (ENEM):

The National Institute of Nautical Studies known as the "ENEM" (Ecole Nationale d'Enseignement Maritime) is located in Mahajanga. It is the only one maritime institute that exists in Madagascar. The ENEM trains seafarers who will serve on board merchant ships and fishing vessels. The institute conducts mainly training on basic safety, basic maritime knowledge and crisis management in terms of professional development courses and it trains ship's captain as well as chief engineers in the area of officer's courses. Apart from Malagasy nationals, the institute trains also student from the Comoros Island and few African Francophone countries. The ambition of the institute is to become a regional institute.



Introduction

Republic of Malawi is a landlocked country in the southeast Africa. It is bordered by Zambia to the northwest, Tanzania to the northeast and Mozambique on the east, south and west. The northern half of the country is bordered by Lake Malawi, which is 570 km long and occupies 24,800 square kilometres of the country (see map below). Malawi's international trade and transport needs depend on its neighbours for access to the sea. For this reason, Malawi suffers transport interruptions whenever there is political instability in the neighbouring countries, like the civil war in Mozambique which went on for about two decades and the recent political turmoil in Zimbabwe – negatively affecting the country's economic growth. To avoid suffering from complete shutdown when such things happen the country has several alternative routes through which country's international trade is conducted. The most reliable ones are; the northern transport corridor through Dar es Salaam port in Tanzania, Nacala and Beira corridors through Nacala port and Beira port respectively in Mozambique, and the southern corridor through Durban in South Africa. Compared to other landlocked countries in sub Saharan Africa, Malawi enjoys a rather good logistical position. Its main economic centre, Blantyre, is only about 300 km from the sea.

Most of Malawi's road, rail and Inland water transport infrastructure forms part of one or more of the four main international transport corridors. Road and rail play a major role as transport modes in the integrated system, more so the southern part of the country. Inland water transport links the northern transport corridor.

As a landlocked country, Malawi has limited influence on the performance of these corridors, but performance of each of the four corridors is evaluated on the basis of the freight handled destined for Malawi, transport cost for each corridor and also the transit period.

This paper attempts to give an overview of the development of inland water transportation in Malawi focusing on infrastructural development, and the role of water transportation in the economic growth of the country.



Map of Malawi showing boundaries with its neighbours

Water Transport in Malawi

Water transport in Malawi started way back in the colonial era when the country was under the British protectorate. The British first built the existing rail network in the southern part of the country, linked Nacala and Beira corridors in Mozambique. Because of the topographic set up taking rail network to the northern part of the country would be difficult and costly and therefore the lake formed the transportation link. That was the birth of inland waterborne trade in Malawi.

Lake Malawi plays a very important role in transportation of goods and passengers in the country, more so as part of the northern corridor to Dar es Salaam in Tanzania. Two ports on the lake, Chilumba and Chipoka stretching 400 km apart, form a link in the integrated transport chain from Dar es Salaam. Chipoka port is the focal point of the lake activities. It is the only port connected to both road and railroad.

Currently management and operation of both shipping and port services are in the hands of private operators through Private Public Partnership (PPP) on concession arrangement. The reason is to improve efficiency, but also to encourage private investment in the sector. Malawi Shipping Company is managing shipping services while Malawi Ports Company is doing on ports.

Shipping Services

Like already mentioned, Malawi Shipping Company is the only main ship operator on Lake Malawi, others are those that do transportation activities on very small scale hence not properly registered and regulated. Previously Malawi Railways Limited, a state owned company, operated ships and ports through a subsidiary company called Malawi Lake Services from 1934 to 1994. When privatisation of Malawi Railways happed in 1994 Malawi Lake Services was delinked and became a Government sub-vented company, until 2002 when a concession was given to Glens Waterways to manage shipping operations on the Lake. Two years later, the concession was terminated due to unsatisfactory performance on the part of the concessionaire; hence Government through the Maritime Administration in the country temporarily took over and directly managed operations of Malawi Lake Services. This state of affairs persisted until 1st November 2010 when the present operator, Malawi shipping Company took over.

The Shipping Company has the interest to do transportation business on Lake Malawi, while at the same time to serve government's interest of meeting Passenger service obligation (PSO). This means going to places where the company may be likely breakeven the running costs.

Transportation of cargo is vitally important on the lake connecting the northern and southern parts of the country, but also connecting the two Islands (Chisumulu and Likoma Islands). The Company therefore has the obligation in the interest of the government to provide sustainable water transport service in order to contribute meaningfully towards economic growth of the country.

Port Services

Ports services on lake Malawi began at the same time as the shipping services, and this made it that the same ship operator was also operator for the ports; Malawi Railways. At first these were simple landing facilities that enabled embarkation and disembarkation of passengers. With time and growth of waterborne trade, four main ports got established and developed to



the modern status. The port in Chipoka is the focal point of lake activities. It is the only port connected to the rail and road network; it also provides container terminal services. The port is 6 meters deep and capable of docking two 750 tons ships; at times though the port suffers from siltation hence need for maintenance dredging to be undertaken time and again.

The Maritime Administration

The Marine Department is a regulatory arm of the Ministry of Transport and public Works, responsible for all matters relating to water transportation, as well as those issues pertaining to the implementation of polices and directions sanctioned under various regional and International Conventions such as Southern Africa Development Community (SADC), Common market for East and Southern Africa (COMESA) and International Maritime Organisation (IMO) etc. As a technical branch of the Ministry, the Department also plays a crucial role in the provision of advisory services to other government institutions and stake holders in Water Transport Subsector.

The mandate of the Department is prescribed in the Inland Waters Shipping Act (1995) which provides a legal framework for the Water Transport Industry. Under this Act, the Department is charged with the responsibility to administer regulatory provisions governing Maritime Safety, Marine Education and Training, Port management and Marine pollution Control.

The objectives of the Department are therefore outlined as follows:

- > Regulation of marine transport services
- > Provision of maritime education and training
- > Provision of administrative and general support services
- > Provision of Marine Environment Management

Organization and Programme Composition

Currently the following Divisions exist in the schedule of the established office of the Marine Department whose activities have been detailed in table 1below.

(A) MANAGEMENT AND SUPPORT

DIRECTOR'S OFFICE	HUMAN RESOURCE MANAGEMENT				
 Policy formulation and guidance on technical and administrative matters Leading and attending International Forums 	RecruitmentPersonnel affairs				
FINANCE	STAFF DEVELOPMENT				
 Budgeting Expenditure control Revenue collection 	Training PlanTraining Management				

(B) SAFETY REGULATORY DIVISION

Procedure on;

- Survey, Registration and Licensing of vessels for seaworthiness.
- Conduct Examinations and Certification for Seafarers.



- Approval and control of ship design and construction
- Co-ordinate SAR activities.
- Co-ordinate safety issues pertaining to International Maritime Conventions.
- Law Enforcement
- Maintenance of Aids to Navigation

(C) PORTS REGLUATORY DIVISION

- Cargo handling
- Storage of cargo
- Attendance to vessels
- Provision of Port Security
- Maintenance and repair of Port Equipment
- Law Enforcement

(D) TRAINING DIVISION

- Training of Merchant Cadets
- Training of Fishing Cadets
- Conducting short courses



NIGERIA I

Nigeria officially the Federal Republic of Nigeria, is a federal constitutional republic comprising 36 states and its Federal Capital Territory, Abuja. It is located in West Africa and lies between latitudes 4° and 14°N, and longitudes 2° and 15°E. It also has a total area of 923,768 km2 (356,669 sq mi) and shares land borders with the Republic of Benin in the west, Chad and Cameroon in the east, and Niger in the north. Its coast in the south lies on the Gulf of Guinea on the Atlantic Ocean. Nigeria also known as "the Giant of Africa" is the most populous country in Africa and the seventh most populous in the world (going by the 2006 census), its population is 140,431,790, with a density of 188.9/km2 (489.3/sq mi) and a coastline of 853 km (420 NM). The GDP of Nigeria using the 2013 estimate is \$478,526 billion making it 30th in the world with a per capita of \$2,827. It has two main rivers the Niger and the Benue River which converge and empty into the Niger Delta, one of the world's largest river deltas and the location of a large area of Central African Mangroves.

Economy

Nigeria, a mixed economy emerging market has already reached lower middle income status according to the World Bank and is the second largest in Africa. Nigeria is the United States' largest trading partner in sub-Saharan Africa and supplies a fifth of its oil (11% of oil imports). It also has the seventh-largest trade surplus with the U.S. of any country worldwide and the 14th-largest exporter of goods to the U.S. According to Citigroup in 2011, Nigeria will get the highest average GDP growth in the world between 2010 –2050, while it remains one of two countries from Africa among 11 Global Growth Generators. Nigeria, now the second largest economy in Africa (following South Africa), is the largest economy in the West Africa Region with about 60% of the regions GDP. It may be noted that Nigeria made history in April 2006 by becoming the first African Country to completely pay off its debt (estimated \$30 billion) owed to the Paris Club.

Current Situation of Sea Transportation

Nigeria has 8,600 km of inland waterways. The longest are the Niger River and its tributary, the Benue River but the most used, especially by larger powered boats and for commerce, are in the Niger Delta and all along the coast from Lagos Lagoon to Cross River. **1. Ports**

The Nigerian Ports Authority (NPA) is responsible for managing Nigeria's ports, some of which have fallen behind international standards in terms of the quality of facilities and operational efficiency. Recognizing that the government lacks the funding and expertise to modernize facilities and run the ports efficiently, the NPA is pursuing partial port privatization by means of granting concessions to private port operators. Under the terms of concession agreements, the government would transfer operating rights to private companies for a finite number of years without forgoing ownership of the port land. Nigeria's principal container port is the port of Lagos and consists of separate facilities at Apapa and Tin Can Island, has a rail connection to points inland.

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Port Harcourt, a transshipment port located 66 kilometers in the Gulf of Guinea along the Bonny River in the Niger Delta, handles about 815,000 tons of cargo each year and also has a railway connection. Both ports are not only responsible for Nigeria's seaborne trade but also serve inland countries such as Niger and Chad. A new port is under construction at Onne about 25 kilometers south of Port Harcourt. Relatively modern and with efficient terminals managed by multinational oil companies, it handles most oil and gas exports.

Other major ports are Warri and Calabar ports, though not very active hold great potentials. Especially the Warri port going by the recent dredging of the River Niger to serve the inland parts of the country.

The Nigerian Ports Authority (NPA) has also recently announced plans to develop two new deepwater ports at Lekki, in Lagos State, and Ibaka, near the city of Uyo in Akwa Ibom.

2. Shipping

The maritime industry which is regulated by the Nigerian Maritime Administration and Safety Agency (NIMASA), has seen potentials for growth over the last couple of years. Although the Ship Registry have about 500 registered ships (with most involved in the Cabotage trade), it has about 40 ships (1,000 GRT and above) totaling 360,505 GRT/644,471 metric tons deadweight (DWT). The ship types for the 1,000 GRT and above are:

Bulk carrier 1,

Cargo ship 12,

Chemical tanker 4,

Petroleum tanker 22,

Specialized tanker 1

ndeed, this number compared to the potentials of the country is negligible. However, there are clear signs that the industry is on an upward movement.

ORGANISATIONS AND HUMAN DEVELOPMENT

1. The Nigerian Maritime Administration and Safety Agency (NIMASA)

The Agency is the apex regulatory and promotional maritime agency under the auspices of the Federal Ministry of Transport. It focuses on areas that include Maritime Safety Administration, Maritime Labour Regulation, Marine Pollution Prevention and Control, Search and Rescue, Cabotage enforcement, Shipping Development and Ship Registration, Training and Certification of Seafarers, and Maritime Capacity Development. There is a cabotage shipping policy which is a result of the 2003 Cabotage Act, guaranteeing that all internal water shipping is handled by National ships owned by Nigerian nationals. The Agency also develops indigenous capacity and implements domesticated International Maritime Organization (IMO) and International Labour Organization (ILO) Conventions.

The Administration has also trained thousands of seafarers in several companies. It is now at the stage of getting these trained cadets onboard vessels for a fee. Going forward, a ship building company is being constructed to build sea going vessels and should be ready to commence operations in the next couple of years.



2. Nigerian Ports Authority (NPA)

NPA carries out these functions and more

- Develop ,own and operate ports and harbours
- Provide safe and navigable channel
- Offer cargo handling and storage services
- Maintain Port facilities and equipment
- Ensure safety and security
- Develop and own property

3. Nigerian Shippers Council

As an agency of the Federal Republic of Nigeria saddled with the responsibility of protecting the interest of Nigerian Shippers and committed to providing adequate and up-to-date trade information to the Nigerian shipper and the international business and shipping community.

4. NIGERIAN INLAND WATERWAYS AUTHORITY

The organization has responsibility over the inland water transportation, virtually performing all the functions of the Maritime Administration for inland water transportation. This mode of transportation is envisaged to grow and be prominent in National planning. Already, the two major rivers that transcends all over the country are been dredged to accommodate large ocean going vessels and more investment is going into training of staff for the organization.



ORGANIZATIONAL CHART



NIGERIA II

1. Country Overview

I and area	Total: 923,768sqkm (Land 910,768sqkm and Water 13,000sqkm). Coastline: 853km					
Lallu al ca .	Coastline: 853km					
Population :	174,507,539 (July 2013 est.)					
Main industries :	Agriculture: 30.9% (cocoa, peanuts, palm oil, maize, rice)					
	Industry: 43% (crude oil, coal, tin, columbite, palm oil)					
	Services: 26% (2012 est.)					
Main trading partners :	Export: US 16.8%, India 11.5%, Netherlands 8.6%, Spain 7.8%,					
	Brazil 7.6%, UK 5.1%, Germany 4.9%, Japan 4.1%,					
	France 4.1%.					
	Import: China 18.3%, US 10.1%, India 5.5%					

2. Maritime Overview

- ① Maritime industry (shipping and water transportation, ports and harbour, seafarers, and naval architecture/dockyards) GDP total, GDP ratio against all industries, characteristics)
 - Nigeria has the second longest length of waterways in Africa. It has 8,600 km of inland waterways. The longest are the Niger River and its tributary, the Benue River. Although, the most used, especially by larger powered boats and for commerce, are in the Niger Delta and all along the coast. However, water transport scores a distant second to road transport with an average share of about 1.6% of Nigeria GDP. But with the dredging at the lower Niger which covers about 572 kilometers of waterways that stretches from Warri in Delta state to Baro in Niger state, the potentials are greater.
 - There is some building of coastal vessels of not more than 300gt, tugs, barges, support boats and repair happening in Nigeria.
 - It has been argued that the maritime industry in both its public and private sectors provides 10% of the job opportunities available in Nigeria. Its public sector including the Nigerian Customs Services, Immigration, Port Police, Nigerian Navy, NDLEA, Standard Organisation of Nigeria, Department of State Security Service, Federal Environmental Protection Agency, National Cargo Handling Agency, National Food and Drug Administration [NAFDAC], Nigerian Ports Authority, Nigerian Shippers Council, National Maritime Authority and Nigerdock etc. altogether provide about 1 million jobs. The private maritime sector including shipping companies also furnishes numerous different categories of jobs to the national economy.
 - As of 2009, Nigeria had less than 3,000 seafarers, while about 2,000 vessels were engaged in cabotage, or local trade between Nigerian ports (with mostly foreign crews).
- ② Main ports (name, cargo handling capacity, characteristics) including planned ports Nigeria currently has 6 major ports (Tincan Island, Apapa, Warri, Port Harcourt, Onne and Calabar Ports) and 10 crude oil terminals (Escarvos, Bonny, Sapele, Forcados, Tuma, Okrika, FOT, etc).

All Nigerian Ports excluding the crude oil terminals handled 76,744,727, 83,461,697, and



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77,092,625 for 2010, 2011 and 2012 respectively.

Cargo Handled 2010 / 2011 / 2012 are:

General Cargo (14,280,476 / 13,216,507 / 19,521,636

Contanerised (8,759,415 / 10,492,381 / 4,961,188)

Dry Bulk (12,968,497 / 13,111,328 / 10,163,742)

The Ports are usually general cargo ports, but some ports like the Apapa Port has a designated terminal for containers called Container Terminal concessioned to Maersk Line. Onne Port too in the Niger Delta services the Oil and offshore Industry.

Between 2007 - 2012 the number of vessels that entered Nigerian Ports are 24,142 with a cumulative GRT of 615,039,057

③ Fleets:

Cargo ship: number of fleet; both domestic and ocean-going category of ships 500GT or more : Ferry, Passenger ships: 24 metres or more or above 20GT

- ④ Maritime policy (government policy, eg. future planning)
- (5) Seafarer/maritime education and training institutions (Name, number of graduates /year, year of establishment)

The major maritime education and training institution are

- 1. Maritime Academy of Nigeria, Oron Established by Decree No. 16 of 1988
- 2. Nigerian Institute of Transport Technology established in the year 1986
- 3. Federal College of Fisheries and Marine Technology, Lagos, Nigeria established in 1969

There are also several other smaller with some named below but not limited

- 1. African Maritime Academy of Nigeria, Oyo, Nigeria
- 2. Coastal Maritime Academy
- 3. Stars Maritime Academy (SMA) Commission in 2003
- ⑥ Foreign countries supporting/assisting in the maritime field: None(eg.: country name, project name, description, year(s), size (amount \$) of grants/loans)
- ⑦ Relationship with Japan in the maritime field (economic cooperation in recent years, technical cooperation, if any)

Economic relations and Technical Cooperation is good, but not in the Maritime industry. The only relationship as regard Technical Cooperation in the maritime industry is the Sassakawa Fellowship to which four Nigerians have enjoyed thus far

3. Maritime organizations and WMU graduates distribution

The Maritiem Organisations are:

- Federal Ministry of Transport (FMoT).
- Nigerian Maritime Administration and Safety Agency (NIMASA)
- Nigerian Ports Authourity (NPA)

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- Nigerian Shippers Council (NSC)
- Nigerian Inland Waterways Athourity (NIWA)
- Nigerian Maritiem Academy (MAN), Oron.

Cannot tell the number of WMU graduate for each, but NIMASA has about 30 graduates

① Organizational charts: (Appendix submitted) which organization is the genuine focal point to IMO?

The genuine focal point of IMO is the Nigerian Maritime Administration and Safety Agency (NIMASA)

- ⁽²⁾ How many WMU graduates are positioned in each organization?
- ③ Selection process for WMU candidature. Is it managed by a particular department? It is managed by the training department

4 . Author of this summary report

Mr. Yusuf Bala (PM, 2008),



TANZANIA

1. Country Overview

Tanzania¹ is located in East Africa between latitudes 10 - 120 South of the Equator and longitudes 290 - 410 East of Greenwich. It shares the borders with eight countries: Kenya and Uganda to the North, Rwanda, Burundi and Democratic Republic of Congo to the West, Zambia, Malawi and Mozambique to the South. While to the East it is boarded with nothing but Western Indian Ocean.

The total land area of Tanzania is 945,000 sq. km which includes a land area of 881,000 sq. km of Mainland; 2,000 sq. km for Zanzibar; 62,000 sq. km of inland water and 3350 sq. km of forest and woodlands. Tanzania also hosts the highest mountain in Africa known as Kilimanjaro Mountain (5895 mts high above sea level).

From the housing census of 2012 the population of Tanzania is 44 million people with the distribution of 51.3 and 48.7 female and male respectively and the population growth rate is 3.0% per annum.

2. Economic activities categorization:

Main economic activities include Agriculture, Industry, and Services which contribute to total GDP. In 2012 the following distribution was in estimate:-

- i) Agriculture contributed to 27.70% which including Farming, Fishing and Forestry.
- ii) Industry was 25.20 which including:- Agricultural processing (sugar, beer, cigarettes, sisal twine) diamond, gold and iron mining, soda ash, oil refining, shoes, cement, apparel wood products, fertilizer and salt.
- iii) Services were 47.20% that cover: Government activities, communications, transportation, finance and all other private economic activities that do not produce material goods.



Chart 1 GDP composition by sector

Source: www.cia.gov/library/publications/the-world-factbook

¹ Tanzania is a short name for the United Republic of Tanzania which is a union of Tanganyika (now referred to as Mainland Tanzania) and Zanzibar (archipelago which is referred to as the Isles)

3. Main trading & trading partners

According to year 2012 world-Factbook's estimation the nation's export reached USD 9 Billion whereby exported commodities were gold, coffee, cashew nuts, cotton and manufactures.

The main export partners and their percentage share in export trade for the same period were India 14.1%, China 11.0%, Japan 6.1%, Germany 5.0 % and United Arab Emirates 4.9 %.

On the other hand imports for the same period were USD 11 Billion and the main imported commodities included consumer goods, machinery and transportation equipment, industrial raw materials and crude oil.

From the same statistics main import partners and their percentage share to imports were China 21.1%, India 16.1%, Kenya 6.6%, South Africa 5.6 % and United Arab Emirates 4.8 %.

4. Coastal line



Source: www.worldatlas.com

Tanzania is coastal State situated in East Africa, Western Indian Ocean, with a coastline of about 1,424 kilometers long which stretches for 1,424 kms from Jasini village in Tanga region on the North to Ruvuma River in Mtwara region, in the Southern part. Tanzania Coastal line encompasses Five Regions of Tanga, Coast, Dar Es Salaam, Lindi and Mtwara.

The multi-border characteristic of Tanzania reinforces its accessibility and gives it



competitive leverage over the neighbouring countries, which possess less exposed boundaries. Other advantages are existence of inland ports as shown in fig. 2.





5. Maritime Administration

Tanzania has no single institution that comprehensively address matters related to the maritime industry. Maritime transport issues, maritime logistics, ship registration, maritime safety, maritime security, and seafarers education are addressed by the Ministry of Transport. On the other hand, issues pertaining to fishing are addressed under the Ministry of Livestock and Fisheries development. Environmental issues are addressed by the Prime Minister's Office. Other Ministries responsible for some issues related to maritime industry includes Ministry of Natural Resource and Tourism as well as the Ministry of Defense and National Service which is responsible for defense against sea aggression under NAVY.

The Ministry of Transport has further formed institutions which carries out maritime responsibilities as identified above Among them is the Surface and Marine Transport Regulatory Authority (SUMATRA) which is the institution dedicated to regulate maritime transport industry (Refer Annex no. I.) SUMATRA regulates a range of activities from seafarers training and certification, maritime safety and security to ports and shipping business. Other services regulated by SUMATRA include shipping agency, shipping lines, port operators, clearing and forwarding agencies and cargo consolidators.

On the other hand, in the Isles there is Zanzibar Maritime Authority (ZMA) that regulates maritime industry within the Isles.

6. Legal framework

National legislations play an important part in the supervision of maritime industry in Tanzania like in any other State. As of July 2013, Tanzania is a party to a total of twenty three

(23) IMO Conventions. The ratified Conventions are incorporated into national legislations to be effectively applicable in the country. The Merchant Shipping Act, 2003 regulates maritime industry within geographical area of the United Republic of Tanzania. Among other things, the Merchant Shipping Act addresses issues of safety at sea, seafarers welfare, environmental protection and preservation as well as issues pertaining to registration of ships. While the Maritime Transport Act, 2006 applies in the Isles.

In case of disputes arising from the maritime industry in Tanzania, such disputes are brought before relevant courts of law. Although there are no special courts for maritime issues, disputes could be resolved accordingly by the Commercial Division of the High Court of the United Republic of Tanzania or any other applicable courts. So far Tanzanian courts have not received many maritime cases.

7. Maritime Transport

A. Shipping

Private Sector plays a big role in Tanzanian shipping as there are about 50 private owned shipping companies handling various shipping activities.

Alongside with private sector participation in shipping, Tanzania under the Ministry of Transport has a shipping company in joint venture with the Peoples' Republic of China under its Ministry of Communications dealing with sea transport. A company is known as China-Tanzania Joint Shipping Company (SINOTASHIP), it is a 50 – 50 ship owning and operating company. Currently the company owns a bulk carrier MV CHANG SHUN II with capacity of 57,000 DWT and expects to order two new general cargo vessels of 15,000 DWT capacity which will be flying Tanzanian flag and therefore create jobs for Tanzanian seafarers in near future.

The Tanzania government under the responsible ministry i.e. MoT also has another shipping company namely Marine Services Company Limited (MSCL). This company operates ferries, cargo ships and tankers on all Major Lake ports including Victoria (linking Tanzania, Kenya, Uganda), Tanganyika (linking Tanzania, Burundi, Democratic Republic of Congo and Zambia), and Malawi (linking Tanzania, Malawi and Mozambique).

MSC's fleet is as follows:-

- On Lake Victoria; there is a passenger ferry MV Victoria, train ferry MV Umoja and cargo and passenger ship MV Serengeti;
- On Lake Tanganyika includes the ferries MV Liemba and MV Mwongozo
- On Lake Malawi is MV Songea.

B. Shipping Traffic at Major Ports

The country's trading in imports as well as exports have been growing and its consequence is being reflected on the growth in shipping especially to the principal port of Dar Es Salaam, which handles all types of ships compared to other ports as depicted for the whole period in review. (Refer Annex no. IV and V)

Hence, bigger deep sea ships are being received than ever before, this is well presented in (Annex no. IV) whereby an increase of GRT in ships calling at Tanzanian major seaports is depicted and this has been possible due to development in port facilities as a whole.

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However, passenger traffic in most ports is fluctuating (Refer Annex no. IV) especially at Lake Ports. Ageing of passenger vessels plying in Tanzanian waters has been one of the courses in declining of passenger traffic. Efforts are underway to curb the situation through the MSCL, and other local as well as foreigners' private investors.

C. Ports

Tanzania is strategically located among land linked countries. The advantage of her geographical position grants her the opportunity to serve other countries transport needs. Countries that rely on Tanzania ports include Uganda, Rwanda, Burundi, Zambia D.R. Congo and Malawi (Refer fig 2).

Apart from the Indian Ocean where three major ports are located i.e. Dar es Salaam, Tanga and Mtwara, thus handle more cargo comparing to minor ones namely Kilwa, Lindi and Mafia, (Refer Annexes III, IV and V), there are navigable Lakes as well as Rivers which are useful for transportation of passengers and cargo. Major navigable lakes include Lake Victoria, Lake Tanganyika and Lake Malawi in which Mwanza, Kigoma and Kyela ports are respectively situated.

Major navigable lakes include Lake Victoria, Lake Tanganyika and Lake Malawi in which Mwanza, Kigoma and Kyela ports respectively are found (Refer fig 2).

Tanzania Ports Authority (TPA) is a government company under the Ministry of Transport currently performs the role of both Landlord and Operator in most of the above mentioned Tanzanian mainland ports and terminals with main functions of promoting the use, developing and managing of port and their hinterlands and also entering into contracts for the purpose of delegating powers through licensing and concession of ports services. While in the Isles there is Zanzibar Ports Corporation (ZPC).

The role of private sector in providing port services has not be undermined. In Tanzania, Public-Private Partnership (PPP) has enabled the International Container Terminal Services Ltd (TICTS), which is a subsidiary company of Hutchison Port Holdings (HPH), to handle containers in Dar Es Salaam Port under concession agreement.

D. Dry dock and Ship Yards

(i) Songoro Marine Transport Ltd. Boatyard

The shipyard is located at Mwanza and is a family owned business registered as a limited liability company in November 1993. Initially the yard was owned and managed by the government of United Republic of Tanzania jointly sponsored with the Dutch Government. The yard undertakes orders of construction of vessels/Boats for both domestic and international customers.

The shipyard has the capacity to build variety of vessels including oil tankers, high speed passenger catamarans, containers as well as bulk and dry cargo vessels. It also serves as a maintenance and repair facility.

(ii) Dar Port Dry Dock

Tanzania Ports Authority (TPA) has a minor drydock yard to cater for repair and maintenances for water craft with low GRT. It consists of a boat slipway with two rails and



two-rail lifting systems, boat shed, woodwork and machine shop, plate shop, and a service jetty.

However due to its wear-and-tear and the increased operation of TPA; it has recently outgrown the intended capacity. Often times some of the commercial vessels currently registered with TPA have to dry-dock in the neighboring countries, an exercise which is not only costly but also causes inconvenience to customers.

To mitigate the aforementioned problems including minimising loss of revenue and enhance services, TPA has plans to procure a floating dock and rehabilitate the existing workshop.

E. Safety and security

Safety of maritime transport is paramount in smooth operations of the maritime sector. Issues of safety are addressed in the Merchant Shipping Act, 2003. SUMATRA has the duty to oversee maritime safety issues in Tanzania.

Although accidents are inescapable but could be reduced by taking proper safety measures. There are 2 (two) recent notable maritime accidents within Tanzanian waters that have claimed a number of lives. On 10th September 2011, MV Spice Islander I a ferry which was operating between Unguja and Pemba, sank off the coast of Zanzibar. She was carrying over 2,000 passengers, 619 passengers were rescued, and over 1,500 lives were claimed whereby only 203 bodies were recovered. It was the worst maritime disaster in Tanzanian history.

In July 18, 2012 MV Skagit capsized in rough seas while in ferry service from Dar es Salaam to Unguja. The ferry had 447 passengers on board; at least 154 were rescued while 81 reported dead and 212 were missing until the end of rescue operations and presumed drowned.

Dar es Salaam Maritime Rescue Co-ordination Center (MRCC) which was commissioned by IMO in 2009 for Maritime Search and Rescue still has minimal capability and its limitation is lack of necessary equipment to maintain the services.

Moreover, the application of IMO model safety regulations for inland waterways vessels and non-convention craft including fishing vessels operating in Africa adopted in 2001 and agreed by most countries in the region including Tanzania has been very useful in upgrading safety as well as pollution prevention standards.

Matters of maritime security are a concern not only in Tanzania but also all around the world. In Eastern Africa issue of maritime piracy are not new and there are ongoing individual as well as collective efforts to eliminate piracy at sea. The Ministry of Defense and National Service (through NAVY) and (Police Marine) under the Ministry of Home Affairs they are working together with the Ministry of Transport (through SUMATRA) to ensure the protection of Tanzanian waters as well as ships plying within the vicinity. So far, cases of marine piracy and armed robbery in East Africa have declined.

8. Marine environment protection and preservation

Tanzania is party to the United Nations Convention on the Law of the Sea 1982. Provisions of the Convention are incorporated in the Merchant Shipping Act, 2003 for the purposes of implementation. The Ministry of Transport (through SUMATRA) and the Vice Presidents' Office



(through NEMC) work together to ensure the protection and preservation of marine environment. Exploration and exploitation of natural resources like natural gas and oil within Tanzania waters bring a challenge to the protection and preservation of marine environment in Tanzania. Appropriate policy and legislations could save marine environment through proper application of the same.

9. Registration of ships

SUMATRA responsibility to Tanzania mainland among others is ships registration while in Zanzibar, the Tanzania Zanzibar International Register of Shipping (TZIRS) is the body responsible for register of ships under the Tanzanian flag. (Ref. Annex no. VII)

Ships registered in Tanzania are of small GRT and as of July 2013 available data present a total of 56 registered ships by SUMATRA with a total registered tonnage of 9968.36.

10. Seafarers and Maritime Education and Training

Tanzania has a number of seafarers trained within and outside the country. Dar es Salaam Maritime Institute (DMI) located in Dar es Salaam Tanzania is a center of excellence in East Africa. DMI offers education and training of seafarers in accordance with relevant IMO Convention.

There are a number of competent Tanzanian seafarers working ashore as well as at sea, within and outside Tanzania. Such competent seafarers contribute much in safety of navigation.

11. Non - Seafarers Maritime Education and Training

Alongside with DMI there is a National Institute of Transport (NIT) and Bandari College that offer maritime courses as well. NIT reports to the Ministry of Transport while Bandari College is owned and run by the Tanzania Ports Authority (TPA), the later was established as port training center to serve for its employees' however since 2010 the institute offers training to other stakeholders in the port community as well. NIT runs various transport courses but also as it is for Bandari College, the institute runs comprehensive Ports and Shipping management and also Marine Engineering courses to a post graduate level.

12. Maritime Organization and WMU Graduates distribution

Tanzania focal point to IMO is SUMATRA which coordinates and represents the country in all maritime issues.

There are over 68 Tanzanian nationals who have graduated from WMU but the absence of proper data base has made it impossible to gather information for all graduates. (Refer Annex VII)

Currently, WMU Sasakawa fellows are working at Dar es Salaam Port, Tanzania; Dar es Salaam Maritime Institute, Tanzania; and Tanzania Navy. (Refer Annex I).

There is no formally prescribed procedure for WMU candidates' selection process. However, individual institutions manage the procedure in accordance to their own relevant policies.

Foreign countries support

Tanzania being a developing country depends much from foreign countries support in

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the Maritime field development. Leading foreign countries supporters include; China, Sweden, Denmark, Norway, Netherlands, Japan, Australia and Egypt

13. Relationship with Japan in the Maritime Field

The Government of Japan and through its agency including Official Development Assistance (ODA), Japan Development Institute (JDI), Japan Bank for International (JBIC) and Japan International Cooperation Agency (JICA) has been one of the principal supporters in providing technical and other maritime education to Tanzanians, in the fields of port planning, port operations, shipping and port infrastructure development.

Notable current projects under the agreement of the Japanese support are:

- > Improving and expanding of the port of Dar es Salaam as well as Mtwara port
- > Acquiring of a Floating dock for Dar Es Salaam Port dry docking

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Tanzania focal point to IMO is SUMATRA which coordinates and represents the country in all maritime issues.

15. Comments

With effective administration and commitment in the implementation of relevant legislations, maritime industry in Tanzania could be improved for the benefit of the economy of the country. Nevertheless, there are challenges in the implementation of legislations as the country is in shortage of maritime professionals to effectively perform duties in the maritime sector. Among other things, there is lack of funds for effective execution of some services like search and rescue. Also, there is a need to establish a comprehensive maritime policy to demonstrate proper course for the industry.

Prepared by: Stella Joshua Katondo PM (2001)



Annex no. 1

Maritime Administrative Organisation and Sasakawa Fellows Positions





Annex no. II

		Abbreviations
A & HRM Division	-	Administration and Human Resources Management Division
BC	-	Bandari College
DMI	-	Dar es Salaam Maritime Institute
GRT	-	Gross Registered Tonnage
JBIC	-	Japan Bank for International Cooperation
JDI	-	Japan Development Institute
JICA	-	Japan International Cooperation Agency
MoD & NS	-	Ministry of Defense and National Service
MoHA	-	Ministry of Home Affairs
MoID	-	Ministry of Infrastructure Development
MoT	-	Ministry of Transport
MSCL	-	Marine Services Company Limited
NIT	-	National Institute of Transport
ODA	-	Official Development Assistance
PM	-	Permanent Secretary
P & P Division	-	Policy and Planning Division
SINOTASHIP	-	China-Tanzanian Joint Shipping Company
SUMATRA	-	Surface and Marine Transport Regulatory Authority
T I Division	-	Transport Infrastructure Division
TPA	-	Tanzania Ports Authority
T S Division	-	Transport Services Division
T S & E Division	-	Transport Safety and Environment Division
TZIRS	-	Tanzania Zanzibar International Register of Shipping
ZMA	-	Zanzibar Maritime Authority
ZPC	-	Zanzibar Ports Corporation

Annex no. III



Annual Growth rates of total GDP

Source: www.cia.gov/library/publications/the-world-factbook





Shipping Traffic at Major Ports

		DAR ES S	SALAAM			TANGA				MTW	ARA			TO	TAL	
	2008/09	2009/10	2010/11	2011/12	2008/09	2009/10	2010/11	2011/12	2008/09	2009/10	2010/11	2011/12	2008/09	2009/10	2010/11	2011/12
1. DEEP SEA SHIPS:	-															
(a). Dry General Cargo Vo	essels															
Number of Calls	369	352	318	342	96	99	76	2	17	16	30	34	482	467	424	378
GRT ('000)	10,512	10,586	10,573	12,201	505	1,312	1,158	29	212	249	229	256	11,229	12,147	11,960	12,486
(b). Container Vessels																
Number of Calls	384	346	467	419				93				28	384	346	467	540
GRT ('000)	5,478	6,433	9,486	8,610				1,445				398	5,478	6,433	9,486	10,453
(b). Tankers																
Number of Calls	122	102	124	120	2	2	1	2					124	104	125	122
GRT ('000)	2,973	2,698	3,240	3,015	28	25	4	59					3,001	2,723	3,244	3,074
Sub-Total -ship call	875	800	909	881	98	101	77	97	17	16	30	62	990	917	1,016	1,040
GRT	18,963	19,717	23,299	23,826	533	1,337	1,162	1,533	212	249	229	654	19,708	21,303	24,690	26,013
2. COASTAL SHIPS:																
(a). Dry Cargo																
Number of Calls	237		536	482	75	125	69	115	27	26	26	48	339	151	631	645
GRT ('000)	34		163	136	35	79	24	35	13	10	10	43	82	89	197	214
(b). Tan kers																
Number of Calls	27	51	65	64	-	-			1	-	4	1	28	51	69	65
GRT ('000)	74	224	248	256	-	-			4	-	2	0.212	78	224	250	256
Sub-Total -ship call	264	51	601	546	75	125	69	115	28	26	30	49	367	202	700	710
GRT	108	224	411	392	35	79	24	35	17	10	12	43	160	313	447	470
Grand- Total -ship calls	1,139	851	1,510	1,427	173	226	146	212	45	42	60	111	1,357	1,119	1,716	1,750
GRT	19,071	19,941	23,710	24,218	568	1,416	1,186	1,568	229	259	241	697	19,868	21,616	25,137	26,483

Source: TPA Annual Statistical Reports

Annex no. V

SUMMARY OF CARGO TRAFFIC HANDLED AT TPA PORTS IN 000' TONNES

	MAJ	OR SEAPORTS	5	MINOR SEA PORTS			МАЈО	ALL PORTS		
YEAR	DAR ES SALAAM	TANGA	MTWARA	KILWA	LINDI	MAFIA	MWANZA	KIGOMA	KYELA	ALL PORTS
2008/09	7,795,044	417,313	122,069	3,197	19,687	13,681	542,612	141,144	10,610	9,065,357
2009/10	8,552,061	427,337	84,354	4,766	3,102	16,790	522,825	76,529	17,869	9,705,633
2010/11	9,919,910	499,621	214,039	2,634	1,758	6,634	486,001	102,150	15,071	11,247,818
2011/12	10,856,757	644,355	235,076	23,170	2,030	7,145	210,284	73,253	21,931	12,074,001
2012/13	12,530,675	457,537	203,644	14,213	2,260	32,675	360,891	82,010	29,614	13,713,519
GRAND TOTAL	49,654,447	2,446,163	859,182	47,980	28,837	76,925	2,122,613	475,086	95,095	55,806,328

Source: TPA Annual Report & Accounts for the year ended 30th June 2009

Annex no. VI

Passenger Traffic for Major ports from year 2007/08 to 2011/12

		MAJOR SEA	PORTS		LAKE PORTS						TOTAL	
	DAR ES	SALAAM	ТА	NGA	MWANZA		KIGOMA		KYELA			IAL
YEAR	EMBARK	DISEMBARK	EMBARK	DIS- EMBARK	EMBARK	DIS- EMBARK		DIS- EMBARK	EMBARK	DIS- EMBARK	EMBARK	DIS- EMBARK
2007/08	352,297	380,270	4,790	7,985	459,377	443,380	11,861	10,814	7,696	5,121	833,818	845,686
2008/09	311,454	317,963	7,985	10,671	434,767	434,767	11,861	10,814	9,425	5,059	775,492	779,274
2009/10	489,083	403,382	8,388	8,282	409,865	409,865	11,033	8,593	8,263	4,344	926,632	834,466
2010/11	472,226	536,505	11,076	12,211	296,661	296,681	11,509	9,524	5,624	4,289	797,096	859,210
2011/12	666,046	676,829	5,732	7,015	262,116	262,341	13,121	11,945	5,774	2,560	952,789	960,690
GRAND TOTAL	2,291,106	2,314,949	37,971	46,164	1,862,786	1,847,034	59,385	51,690	36,782	21,373	4,285,827	4,279,326

Source: TPA Annual Statistical Reports

Annex no VII

	No. of Ships	GRT					
Domestic fleets	94	56993.92					
International fleets	157	585141.42					
Total	251	642135.34					
(Source: ZMA)							

Tanzania Zanzibar Fleet as of 4th Oct 2013

Annex no. VIII

UNITED REPUBLIC OF TANZANIA WORLD MARITIME UNIVERSITY GRADUATES NON SASAKAWA FELLOWS

S/NO.	NAME	YEAR OF GRADUATION	REMARKS
1.	Daniel S. O. Kisa	1984	Retired - Tanzania Ports Authority (TPA)
2.	Zacharia Gabriel Mori	1985	
3.	Che Chihwalo Julius G. Ndalama	1985	Retired TPA
4.	Abraham Samuel Massawe	1985	
5.	Capt. Gilbert Luka Mokiwa	1987	Retired TPA
6.	Josephat Shanta Natianota		
7.	Justus R. B. Blazi	1988	MoID
8.	Abdi Omar Maalim	1989	
9.	Richard Daud Nzowa	1989	
10.	David Raphael Matengula Lwimbo	1990	Deceased
11.	Abdulla S. Lutavi	1990	
12.	Abdulah Hussein Kombo	1990	
13.	Joachim Emmanuel Chipa	1993	
14.	Ulimbakisya F. S. Kamola	1993	
15.	Onael Ezekiel Mdobilu	1993	
16.	Theresia B. Kisenga	1994	
17.	Peter Arthur Lupatu	1994	Surface and Marine Transport Regulatory Authority (SUMATRA)
18.	Hamza Makame Omar	1995	
19,	Verdiana Nkwabi Macha	1995	
20.	Abullah Juma Abdullah	1995	
21.	Lucas Ndewonaona Saronga	1996	
22.	Hamad Mbarouk Mbarouk	1996	
23.	Elizabeth Serf Chingalame	1997	National Institute of Transport (NIT)
24.	Alli Mohamed Ndagula Mkango	1997	Tanzania Ports Authority (TPA)
25.	King Kurwijira Ngabho Chiragi	1997	Surface and Marine Transport Regulatory Authority (SUMATRA)
26.	Thomas Justine Mayagilo	1997	Retired DMI
	•		

Country Report



S/NO.	NAME	YEAR OF GRADUATION	REMARKS
27.	Mkakili Fauster Ngowi	1997	МоТ
28.	Charles A. S. Msigwa	1998	
29.	Alhaj Masoud Sururu	1998	
30.	Farida Idrisa	1998	
31.	Modest William Kakusa	1999	Tanzania Ports Authority (TPA) - To retire Jan. 2014
32.	Gerson Japhet Fumbuka	1999	East African Community (EAC)
33.	Nelly Kyejo Mtaki	2000	National Institute of Transport (NIT)
34.	Pilly N. B. Saidi	2000	Food & Agriculture Organisation (FAO) – Tanzania
35.	Mussa Mandia	2000	
36.	S. G. I. Tumpe Mwaijande	2000	MoT
37.	John Kusirieli Moshi	2000	Deceased - Oct. 2013
38.	Hebel Mhanga	2001	Tanzania Ports Authority (TPA)
39.	Abdulla M. Abdullah	2001	
40.	Deatus R. Kahindi	2002	Tanzania Ports Authority (TPA)
41.	Aisha Chanyika	2002	Tanzania Ports Authority (TPA)
42.	Reginold George	2002	World Logistics Company Ltd
43.	Emmanuel Ndomba	2002	Maritime Alliance
44.	Fatuma Iddi Masasi	2003	Tanzania Ports Authority (TPA)
45.	Dolores Pius Ng'wandu	2003	SUMATRA
46.	Lucy Kachele	2003	Deceased
47.	Jovin J. Mwemezi	2006	East African Community (EAC)

List of Participants

	Country	Year of Graduation	Gender		Specialization	Organization / Department / Title
1	Cameroon	2012	Ms. Jenette Tifuh MUJINGNI CHO		MSEA	Ministry of Transport Department of Maritime Affairs and Inland Waterways Senior Staff
2	Cote dlvoire	2009	Mr. Lazare Aké ABE		MLP	Ministry of Transports General Directorate of Port and Maritime Affairs Research Analyst
3	Ethiopia	2007	Mr. Feseha Andualem GETU		SM	Logistics and Shipping Service P.L.C Managing Director Office Managing Director
4	Ghana	2001	Ms. Felicity Aba Ankoma-Sey	0	РМ	Regional Maritime University Port and Shipping Department/ Academic Lecturer
5	Ghana	2002	Ms. Catherine HAIZEL	0	MET	Regional Maritime University Ghana Nautical Studies Senior Lecturer
6	Ghana	2008	Ms. Nana Esi QUANSAH- SÖDERBERG		PM	Ghana Ports and Harbours Authority Marketing and Public Relations SNR Marketing and Public Relations Officer
7	Ghana	2011	Mr. Dallas Eric LARYEA	0	MSEA	Regional Coordinator for West and Central Africa
8	Ghana	2012	Mr. Alexander ADU-ANTWI	-	MLP	Ministry of Fisheries & Aquaculture Dev. Fisheries Commission Fisheries Officer"
9	Kenya	2000	Mr. Musa Hassan MUSA		MET	Kenya Ferry Services Ltd. Managing Director
10	Kenya	2001	Mr. Kennedy KISHAWI		MET	Technical University of Mombasa, Kenya Mechanical & Automotive Engineering, Marine Engineering Section Tutorial Fellow
11	Kenya	2002	Mr. Stephen Mwamure TOYA	600	MSEP	Kenya Ports Authority Marine Engineering / Projects Principal Marine Engineer (Projects)
12	Kenya	2003	Mr. Samwel Kipkosgei KIPTOO		РМ	Kenya Ports Authority Conventional Cargo Senior Operations Officer (MIS & STAT)



	Country	Year of Graduation	Gender		Specialization	Organization / Department / Title		
13	Liberia	2000	Mr. Amos Lasannah ZANWONJAH		PM	Montgomery Environmental Services, Inc. Administration President/CEO		
14	Madagascar	2010	Mr. Jean Edmond RANDRIANAN- TENAINA		MLP	Ministry of Transports Ports, Maritime and Waterways Agency Advisor and Assistant of the Director General		
15	Malawi	2012	Mr. Joseph Sheketeni BANDA		SPM	Ministry of Transport Marine Department- Ports Management Chief Ports Engineering Officer		
16	Nigeria	2004	Mr. Jack Okon SHOWELL	and the second s	MA	University of Calabar Oceanolography Chief Technologist		
17	Nigeria	2008	Mr. Yusuf Mohammad BALA		PM	Nigerian Maritime Administration and Safety Agency (NIMASA). Marine Environmental Management Senior Marine Environmental Management Officer		
18	Nigeria	2011	Mr. Geoffrey Gurumyen SEMNOE		MLP	National Assembly Nigeria Marine Transport Committee Senior Legislative Aide		
19	Tanzania	2001	Ms. Stella Joshua KATONDO	R	PM	Tanzania Ports Authority Operations Department Principal Operations Officer		
20	Tanzania	2007	Ms. Tumaini Shabani GURUMO	Can and	MLP	Dar Es Salaam Maritime Institute Maritime Transport Department Lecturer		
21	Tanzania	2008	Mr. Hassan Mrisho KHERI	640	MLP	Tazania Peoples Defence Force (TPDF) Law Department Legal Officer		
22	U.K.	Lecturer	Mr. Osamu MARUMOTO		Counter-Pir	al Maritime Organization acy Project Implementation Unit eer (Operation & Capacity Building)		
23	Japan	Lecturer	Mr. Toshio HIKIMA	and a	Marine Technical College Principal			
24	Japan	Secretariat	Mr. Eisuke KUDO		Ocean Polic Special Advi	y Research Foundation iser		
25	Japan	Secretariat	Mr. Shinichi ICHIKAWA		Ocean Policy Research Foundation Maritime Technology Department, Maritime Affairs Div. Section Chief			

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